AUSTRALIAN BUSINSINAN

FEATURE ARTICLE

OUR BUSHCRAFT HERITAGE - ARE WE LOSING IT?

IN THE OLD STYLE...

SWAGGIN' IT IN THE OLD STYLE

FIRE BY FRICTION - THE HAND DRILL

GEAR REVIEWS

WE REVIEW SVÖRD'S DROP POINT HUNTER KNIFE AND MORE

BUSH TUCKER

WILD PLANT FOOD - SAFETY FIRST

TRIP REPORT

MAGAZINE

TWO-NIGHTER SWAG WALK

HISTORY

AUSTRALIAN WWII BUSHCRAFT SURVIVAL TRAINING

EDITORIAL

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'day and welcome to the launch issue of Australian Bushcraft Magazine!

Australia has a rich heritage of bushcraft equal to anything coming out of North America, Scandinavia or the rest of Europe and yet knowledge of this unique Aussie heritage is nearly unknown.

That is the situation Australian Bushcraft Magazine seeks to remedy. You'll read about how Indigenous Australians and European settlers came to grips with our unique environmental conditions, old ways that still work today, and there won't be a kuksa in sight, but there may be a noggin or coolamon or two.

The magazine will also cover naturalist topics such as our unique plants, animal behaviour and seasonal changes and indicators. You'll read about time-honoured methods of dealing with Australia's unique climatic conditions and natural hazards. You'll read about well-known and less than well-known Aussie bushcraft practitioners, read reviews of interesting products, books and events and you'll follow Aussie bushcrafters as they report on their trips out bush.

So how much per issue? Nothing. Zip. Zeroit's a free download and always will be. The purpose of Australian Bushcraft Magazine is not to spin a profit, it's to enlighten, educate, spark curiosity and inspire. Nothing more, nothing less. Download each quarterly issue for free at your convenience or you can order a hard copy for your reference bookshelf.

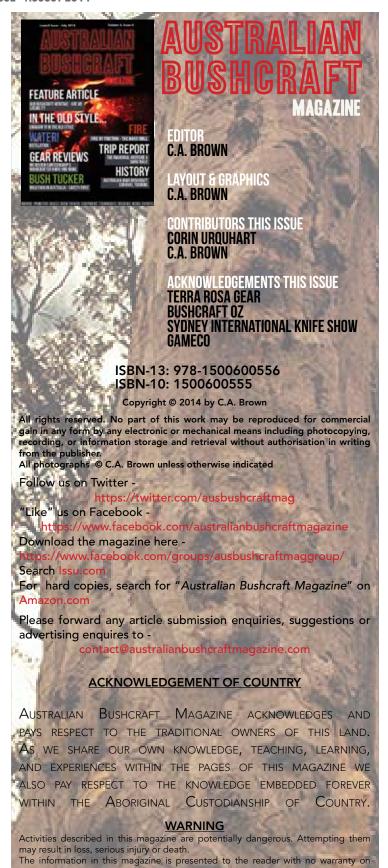
I'd like to apologise to our readers for the week's delay in the release of the Launch Issue. Aside from Corin Urquhart's great article on fire by friction with the hand drill, this issue has been completely written, typeset, edited, laid out and photographed by me. Anticipated and promised assistance with various aspects of the production of this issue didn't eventuate, so since embarking on this project in June this year I've been a one-man band climbing a steep learning curve using a frayed zero-budget shoestring and it's all been complicated by the release of the mag about three months before we were ready for various reasons. Thanks for your understanding.

If you'd like to contribute an article or letter to the editor, or if you wish to enquire about advertising your product, service or event in the magazine, please write to us by email at

contact@australianbushcraftmagazine.com.



Editor



using information in this magazine.

It is possible there may be significant omissions and errors in information presented. Readers embarking on bushcraft or remote area survival training activities should undertake their own research or complete proper training in the subjects presented

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rather than relying fully on the information presented in this magazine.

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FIRE

FIRE BY FRICTION - THE HAND DRILL

BY CORIN URQUHART

Photos courtesy Anne-Marie Seve

hen I became heavily involved in a what we today might call the Australian bushcraft "scene" in 2011 I was a firm supporter of the Bic lighter. Why would you muck around with friction fire, when with the flick of a tiny wheel I could have instant fire? In a world where instant gratification has become the norm, it made little sense to me even try anything else.

It was in January 2012 that I first got a taste for what friction fire was all about. I had attended a meeting organized on the BushcraftOz Forum. About 10 like-minded people, camping in the bush for a few days, sharing knowledge and experiences. When the fire sticks came out I openly scoffed... "Pffftt... who needs that when you have a Bic lighter???"

I watched as forum member "Wentworth" spun his hand drill, showing us the technique he had developed after 6 months of trying to learn this skill from YouTube videos of North American and European methods. These were methods that did not necessarily neatly transcribe to the Australian environment. Our plants here are different and Australian species suitable for this type of friction fire had to be researched, located and tested.

In this case the species being used was Xanthorrhoea, otherwise known as the grass tree, kangaroo-tail or black boy. I guess this piqued my interest... this guy had just started a fire by rubbing two sticks together and using a plant so common it can literally be found all over Australia. He did not need a bic lighter, and it had only taken him a few short minutes.

After my first attempt I was hooked. I had to develop this skill and practice. I wanted to try combinations of every native timber I could get my hands on. I started to get an understanding of where the best drills and hearth boards could be found in the areas I visited, and it became a personal challenge to find a single grass tree stem and use it as both the drill and hearth to start a fire.

The pictures on the following pages show that goal being achieved. In April of 2012 I started my first fire using only a single grass tree flower spike.

My personal best time from wood to an ember is 17 Seconds. My method and advice will no doubt differ from the next person, I am by no means an expert, but this is what works for me.

SOME AUSTRALIAN WOODS AND TINDERS SUITABLE FOR FIRE BY FRICTION

Wood

- Xanthorrhoea (Grass Tree) stalk
- Lantana
- Melaleuca (Paperbark)
- Moreton Bay Fig
- Sweet Pittosporum
- Native Mulberry
- Casuarina (She-oak)
- Radiata Pine
- Native Hibiscus
- Victorian Christmas Bush

Tinder

- Teased and crushed inner bark of the stringybark
- Teased and crushed dry Cabbage Tree bark
- Crushed spinifex grass
- Bone dry crushed kangaroo dung
- Bone dry crushed wombat dung
- Teased cattail fluff
- Shredded bone dry paperbark
- Shredded bone dry eucalyptus leaves
- Crushed dry grass tree fronds
- Dry Banksia flower styles and anthers

CORIN'S STEP-BY-STEP METHOD OF ACHIEVING FIRE BY FRICTION USING THE HAND DRILL

Step 1

Start with a hearth board and drill that is known to work. Borrow or trade for a set, preferably of local materials, from a local bushcrafter. Grass tree flower spike is recommended for beginners.

Step 2

The hearth board is normally taken from the base of the flower spike where it joins the grass tree. This area is normally the hardest and tightest grain and I find it works best. The material should not be soft and pithy or indent easily. I have found in my region near Sydney, the best specimens for hearth boards are found on dry ridges. The species that grow in hanging swamps and damp areas have wonderful big stalks but are so soft as to be useless.





Step 3

The drill is normally harvested from between the base of the flower down about 600mm. When starting out, longer is better. My personal preference is for a drill about the diameter of my little finger. I find these work much quicker. It is true they are harder on the hands than a thicker drill however.

Step 4

Using a knife, split the hearth board, depending on the thickness, in half or if it is thin, taking about a third of the height to leave a flat surface.

Step 5

Cut two lines across the grain, the width of your drill apart. Cut with the grain to form a square and pry out the material with the point of your knife.

Step 6

I normally start with a drill cut off pretty much square, and laying the thicker end of the drill into the divot I rotate the drill hard and fast for a few seconds to refine the hole.

Step 7

Next I cut a "V" into the hearth from the edge into the centre of the hole.

Step 8

I place a leaf under the "V" to catch the powder as I drill.

Step 9

Using both hands and starting at the top of the drill I rotate has fast as I can, applying as much downward pressure as I can. I go as hard as I can right from the start. As soon as you see smoke you know it is time to go even faster! This is the critical time and the difference between a drill that keeps smoking and the development of an ember.



AUSTRALIAN BUSHCRAFT MAGAZINE



Step 10

Once the smoke can be seen coming from the powder, and not just the drill you should be OK to stop.

Step 11

Take your time... there is no hurry now. Carefully remove the hearth board and pick up the leaf... blow gently to develop the coal. If you blow too hard you will blow away the powder and end up with a coal that is small and hard to use.

Step 12

Transfer the coal to the tinder bundle and holding it up and downwind so the smoke does not cause you problems, gently blow the coal into the tinder until you coax it into a flame.

Step 13

With your fire materials already gathered and laid out, it's just a matter of adding the flaming tinder bundle. A few minutes later you can put the billy on... on a well deserved fire!



Profile - Corin Urquhart

Corin completed his Advanced Certificate in Outdoor Guiding in 1999. He has a deep love of the outdoors and particularly bushwalking and kayaking. He has held several roles with the Scouting association including Region Commissioner for Adventurous Activities. He is a moderator on BushcraftOZ Forum and founding member of the Australian Bush Food, Bush Tucker, Medicines, and Useful Plants group on Facebook. He is a knifemaker and supplier of knifemaking materials and equipment.

TRADITIONAL AUSTRALIAN ABORIGINAL METHODS OF MAKING FIRE BY FRICTION

Method No. 1: Hand Drill



Perhaps the oldest method of fire-making in Australia. The most common wood used is grass-tree stalk for both drill and hearthboard. When prepared and ready to use, the drill and hearthboard are known as "fire sticks". Dried kangaroo or

wombat dung is placed in the notch and a little sand sprinkled in the "divot" in the hearth to hasten ignition by increasing the amount of wood dust.

Method No. 2: Fire Saw

This method uses a softwood hearthboard with a split down the centre, chocked open with a small wooden wedge. Into the gap created is placed dried tinder. The "saw" is hardwood. Typically a two-person technique, with two people moving the "saw" in a



reciprocating action. In some areas a woomera is used as the saw and a shield as the hearthboard.

Method No. 3: Fire Plough



The fire plough is common throughout Polynesia and New Guinea and it is thought the method was spread to Northern Australia via Torres Strait Islander groups. A hardwood "plough" is rapidly rubbed down a groove in a softwood

hearth. Tinder is placed at the end of the hearth to catch the coal which develops. This is a very quick method which can be used with grass-tree stalk as both plough and hearth.



n the wallaby", "humpin' the bluey"...
ring a bell? No? How about "Waltzing
Matilda"? These are old travellers'
slang terms for taking to the track
with a swag.

Traditionally in Australia, the swag was a sheet of proofed calico or oilcloth, and a blanket or two rolled up with a pair of leather straps or some rope to hold it all together. Spare clothing and other possessions were bundled up inside the roll and the whole thing was offset by a dilly bag, otherwise known as a "tucker bag", "gunny sack" or "nose bag", which was tied off to the swag's shoulder strap and slung over the shoulder to lay on the chest of the wearer.

Whether by design or just by happy coincidence, the result was a well-balanced load-carrying system which unlike most traditional and modern backpacks, put the centre of gravity close to the wearer's spine and along almost the same axis. This meant no stooping and a heavy load could be carried with comfort. Only a couple of modern load-carrying systems have been able to achieve similar results, the most well-known perhaps being the Aarn Bodypack systems designed by Aarn Tate in New Zealand.

In 1907, Australian poet and yarn-spinner Henry Lawson published an essay called *The Romance of the Swag* where he describes the design, philosophy and usage of the traditional swag in vivid detail;

'The swag is usually composed of a tent "fly" or strip of calico (a cover for the swag and a shelter in bad weather - in New Zealand it is oilcloth or waterproof twill), a couple of blankets, blue by custom and preference, as that colour shows the dirt less than any other (hence the name "bluey" for swag), and the core is composed of spare clothing and small personal effects.

To make or "roll up" your swag: lay the fly or strip of calico on the ground, blueys on top of it; across one end, with eighteen inches or so to spare, lay your spare trousers and shirt, folded, light boots tied together by the laces toe to heel, books, bundle of old letters, portraits, or whatever little knick-knacks you have or care to carry, bag of needles, thread, pen and ink, spare patches for your pants,

and bootlaces. Lay or arrange the pile so that it will roll evenly with the swag (some pack the lot in an old pillowslip or canvas bag), take a fold over of blanket and calico the whole length on each side, so as to reduce the width of the swag to, say, three feet, throw the spare end, with an inward fold, over the little pile of belongings, and then roll the whole to the other end, using your knees and judgment to make the swag tight, compact and artistic; when within eighteen inches of the loose end take an inward fold in that, and bring it up against the body of the swag.

Fasten the swag with three or four straps, according to judgment and the supply of straps. To the top strap, for the swag is carried (and eased down in shanty bars and against walls or veranda-posts when not on the track) in a more or less vertical position--to the top strap, and lowest, or lowest but one, fasten



A 1906 sketch of Henry Lawson by Frank Mahony. Lawson carries his own well-travelled swag, dilly bag and a water bag. *H30825 State Library of Victoria*



This engraving from Brereton's 1899 book *Landlopers* shows the correct way to sling a swag - over one shoulder.

the ends of the shoulder strap (usually a towel is preferred as being softer to the shoulder), your coat being carried outside the swag at the back, under the straps. To the top strap fasten the string of the nose-bag, a calico bag about the size of a pillowslip, containing the tea, sugar and flour bags, bread, meat, baking-powder and salt, and brought, when the swag is carried from the left shoulder, over the right on to the chest, and so balancing the swag behind.

But a swagman can throw a heavy swag in a nearly vertical position against his spine, slung from one shoulder only and without any balance, and carry it as easily as you might wear your overcoat.

Some bushmen arrange their belongings so neatly and conveniently, with swag straps in a sort of harness, that they can roll up the swag in about a minute, and unbuckle it and throw it out as easily as a roll of wall-paper, and there's the bed ready on the ground with the wardrobe for a pillow.'

Myles Dunphy, one of the fathers of modern bushwalking and a fervent conservation activist, undertook long bushwalking trips in the early 20th Century using the swag as his load-carrying system. Like the system described by Lawson in *The Romance of the Swag*, Dunphy's swag consisted of an oilcloth flysheet, leather

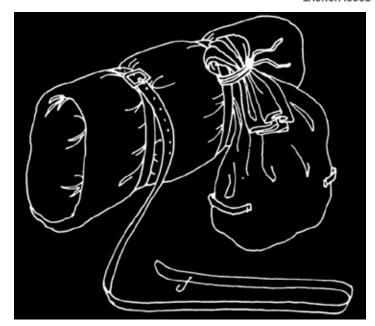


Diagram of the "Dungall" swag as used by Myles Dunphy and Herb Gallop. Note the long swag strap, the fencing wire strap-fastening hook and the dilly bag tied off to the other swag strap.

straps, oilcloth groundsheet, blankets, etc. the weight of which was offset by a dilly bag. First used by Myles Dunphy and his mate Herb Gallop on an epic, weeks-long bushwalk from Katoomba to Nowra in 1912, the swag system was dubbed the "Dungall Swag".

Without gear, the main parts of the Dungall swag - flysheet, straps and dilly bag - weighed only 700g, but the system was fully adjustable and could accommodate loads of up to 30kg if necessary. Such loads could be carried with far more ease, if not comfort, than the equivalent load in a rucksack. The astute reader may notice that nowhere in Dunphy's swag or in the system described by Lawson are there any sewn canvas envelopes with foot and pillow pockets, metal ring buckles, zippers, fibreglass poles or mosquito netting.

Unlike the almost universally heavy and bulky modern interpretations of the swag, those used by the old timers weren't intended as a waterproof sleeping bag cover or bivy bag, let alone as a hooped bivy tent.

In fine, but cool weather they would wrap themselves and their bedding in the flysheet to add a bit of bulk, windproof their blankets and keep the dew off. In rainy weather however, the flysheet was pitched separately as a tarp or in some cases, as described in John Le Gay Brereton's



1899 book *Landlopers*, an aboriginal-style *gunyah* shelter or humpy was built out of natural materials found onsite. The idea of sleeping out in the open wrapped up in your swag in the middle of a downpour would have had old timers like Myles Dunphy chuckling.

Does this mean that all the new-manufactured canvas swags out there are useless as a bushwalking load-carrying system? Not at all. With careful selection and planning, some basic modifications and a bit of forethought, any "traditional" pattern swag may be used and there are several types which are nearly perfect. When selecting a modern canvas swag for bushwalking you want the following features:

- Relatively lightweight canvas
- Decent-sized foot, sleeping mat or pillow pocket
- Can open out to act as a tarp

The lighter weight the canvas, the lighter your slung swag will be. 8 oz. canvas is the perfect weight for a traditional bushwalking swag.

Although traditional flysheet swags like Lawson's, Brereton's or Dunphy's didn't have newfangled embellishments such as pillow or foot pockets, these can come in handy. Rather than rolling the swag with all the bedding gear laid out, you can fold or roll your blankets and place them inside the foot or pillow pocket. Roll the canvas swag around it all for a relatively weather-proof system.

Some swags have eyelets or loops built into the corners of the opened swag for use as a tarp in the traditional manner.

Modern canvas swags which can work as bushwalking swags include:

The Terra Rosa Gear Woodcrafter's Swag - http://www.terrarosagear.com/woodcrafters-swag

The Wild Country Wanderer Swag - Single - http://www.raysoutdoors.com.au/online-store/products/Wild-Country-Wanderer-Swag-Single.aspx?pid=241565

The What Price Glory Officer's Bedroll - http://whatpriceglory.com/shopexd.asp?id=4766

Today the traditional swag has been all but forgotten. Perhaps it's time to bring it back. Modern materials mean we have an opportunity to revive the concept of the bushwalking swag and let it compete on a level playing field with modern ultra-lightweight bushwalking packs.



A BASIC SWAG SYSTEM:

- Waterproof fly sheet today we might use a poly tarp or a nylon hootchie.
- A waterproof groundsheet to sleep on a one-person tent footprint or even a length of Tyvek or black builder's plastic are modern equivalents.
- A couple of blankets or a sleeping bag as bedding.
- Two leather straps to keep the rolled swag together

 one of which was longer and doubled as a shoulder
 strap. You can use a couple of belts or tie your swag with
 ropes and use a towel as a shoulder strap.
- A dilly bag improvised from a sugar or flour bag. Modern equivalents might be a pillow slip or a drawstring calico book bag.

<u>Notes:</u>

Stow your coat and spare clothing in the swag roll and keep your billycan, strike-a-light, tinder box, pannikin, knife, spoon and tucker in the dilly bag, as well as anything else which you might want close to hand while "on the wallaby".

The day's water was carried by hand in a flax water bag or in a 3-pint billy with the lid tied on. After the First World War, 2-pint enamel army water bottles slung on a shoulder strap were often used.

OUR BUSHCRAFT HERITAGE

ARE WE LOSING IT?

BY C.A. BROWN

Since the late 1990s there has been a global resurgence in what we now call "Bushcraft". The influence of Northern Hemisphere bushcraft has eclipsed our own unique Australian traditions to the extent that there is an apparent "cultural cringe" developing whereby Australians are forsaking their own bush heritage in favour of the North American or Scandinavian traditions they see on TV or on the internet.

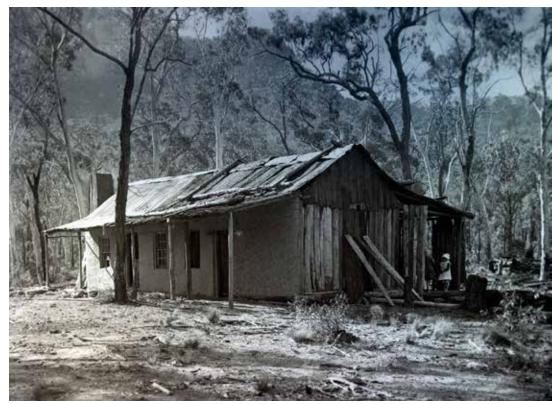
his situation is due in part to a lack of information on Australian bushcraft and it is also due to confusion about what Australian bushcraft actually is. For the purposes of this article, we'll break down "Australian Bushcraft" into three main distinct, but interrelated traditions.

The first Australian Bushcraft tradition is Indigenous Knowledge. Indigenous Australians have, over tens of millennia, achieved a mastery of bushcraft in the Australian landscape. Despite a rich

culture and traditions, Indigenous language groups had only a limited manufacturing capability for tools and other technology and vet their civilisation and culture thrived in our harsh environment. due This was and hardpriceless won knowledge, both practical and mystical, of the land and waters, the plants and animals, fish, birds and insects which make up the delicate tapestry of natural life in Australia.

The second Australian Bushcraft tradition is Australian Pioneer Lore. Australia's European settlers were blow-ins from across the vast oceans, but they were hardy and adaptable - they had to be to survive the strange and harsh environment they found themselves in. These foreign-born pioneers and explorers learnt to read the country, live with the dangerous animals, the floods and the bushfires and they passed their knowledge onto their Australian-born offspring.

The third Australian Bushcraft tradition is that of what we might call "living off the land" - military-style, survival-based bushcraft. This



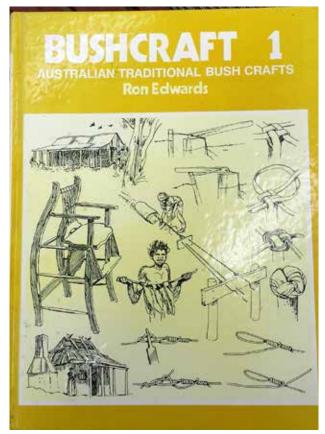
tradition is Australian Wattle and daub and slab hut in the Capertee Valley, NSW in the 1890s. Pioneer Lore. Australia's State Library of Victoria H91.300/478

evolved over the first half of the 20th Century, reaching its pinnacle during WWII but has remained firmly planted in the Australian consciousness ever since. It takes aspects of certain Indigenous Knowledge and Pioneer Lore and adapts them to short-and-long-term remote area survival in the Australian outback, desert and bush.

Now that we've had a go at defining Australian bushcraft, what's the current state of it? Thankfully there will always be Indigenous Australians out there practicing and teaching the Old Ways of their ancestors. The efforts of people like the late Ron Edwards and others in documenting and practicing our pioneer lore have helped to keep it within living memory. As for military-style "living off the land", the WWII-era handbooks are still available and there is a vibrant civilian military-style survival training industry here in Australia along with world-class, highly-competent military training organisations such as the Royal Australian Air Force's Combat Survival Training School at RAAF Townsville in



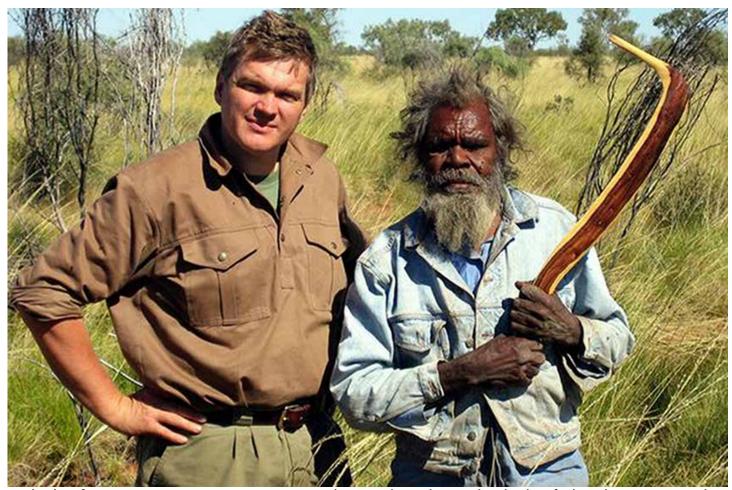
Victorian Surveyor F.C. Chomley working in thick bush in the Grampians in the 1910s. A high-level of bushcraft was stock in trade. State Library of Victoria H2013.231/18



Ron Edwards' book Bushcraft 1 - first of a 10-part series of books documenting the old ways and keeping our pioneer lore alive for posterity.

North Queensland. There's little danger of the hard-won lessons of the past 70 years being lost.

However, the influence of not-relevant overseas bushcraft traditions still threatens to overshadow our own home-grown bushcraft and lure novices away from the path of Australian bushcraft. Aussie bushcraft practitioners spending a weekend car camping within earshot of scores of dirt bike riders and Grey Nomads while feebly playing at "northern bushcraft" in the tick-ridden ecological wasteland of a commercial radiata pine plantation imitating what they see on US or UK YouTube videos is a little sad and yet that is often the public face of modern Australian bushcraft - on the internet at least. The only real answer to this problem is to promote awareness of and educate the general public about Australian traditional bushcraft. This magazine is just one attempt at promoting Australian bushcraft but there are other groups and organisations who have quietly been doing the same for years. These include various websites, blogs and forums such as BushcraftOz and survival.org.au. But that's just the "internet bushcraft" factor and the online component is certainly not the be all and end all.



UK bushcraft guru Ray Mears seems to care more about traditional Australian bushcraft than the average modern Australian "internet bushcraft" enthusiast. Image courtesy BBC - CD25166924

All around the country there are people who have been practicing what we might call "bushcraft" since their first tentative steps outdoors. These folk may call what they do "camping" or "bushwalking" or "hunting" or even "work", but they probably don't call it "bushcraft".

Park rangers, mining exploration teams, surveyors, station managers, farmers, remote area police, forestry workers, biologists, environment workers, guides, military personnel, stockmen, anthropologists... these are all folk for whom bushcraft in one way or another remains a part of everyday life.

Whether they will admit it or not, our bushcraft heritage is a part of the identity of all Australians and it connects us to our homeland. It's in our blood. It's that part of us that chokes up a little while we gaze at a glorious sunset over the western desert. It's that part of us that gives us goosebumps as we marvel at 30,000 year old Indigenous rock art at Jowalbinna or the Gu'gu Yalangi galleries. It's what draws us to the bush

and to the mountains and to the rainforests time and again. It's what drives us to learn all we can about the land and the plants and creatures which inhabit it. No amount of outside influence will change that.

So are we losing our bushcraft heritage? No, we're not. It will always be there. Long after the whole foreign bushcraft fad dies down and even its most fervent adherents have on-sold their expensive knives, axes and heavy waxed canvas backpacks and abandoned it all for a new and more exciting hobby, our own traditions will remain strong.

Still, we can promote our own bushcraft heritage through learning and then teaching the skills unique to our landscape and through sharing the knowledge and the stories of those who came before us with as many people as possible. If we continue to educate, build awareness, stimulate curiosity and inspire others to do the same, we'll succeed in keeping our traditional bushcraft heritage somewhere within the general sphere of public consciousness where it belongs.

GEAR REVIEWS

This issue we review the Svörd Economy Series Drop Point Hunter knife, the Ord River Quart Pot, and the British Army 1944 Pattern Waterbottle Set.

GEAR REVIEW: SVÖRD ECONOMY SERIES DROP POINT HUNTER KNIFE



Product description from Svörd:

"The Svörd Drop Point Hunter is a no frills knife designed for basic but essential duties. The blade is Swedish high carbon tool steel with a drop point blade whilst the handle is hardwood. Supplied with black leather belt sheath. Blade is individually hardened and tempered using a unique heat treatment process. Blade is hand ground with a water cooled stone to produce a convex razor edge. Designed and produced by Bryan Baker." **REVIEW BY C.A. BROWN**



ake no mistake. Svörd's Economy Series Drop Point Hunter is not pretty. It's cheap and cheerful and a bit rough choice for hard use out bush?

The Drop Point Hunter isn't much to look at out of the box. The wood scales are heavily varnished and look like they belong on a steak around the edges, so is it a good knife. The blade seems fine although the grind and Svörd's signature forge scale finish on the

test example were uneven and the blade was also varnished heavily. The varnishing is great for long term storage of a carbon-steel knife like this and it works not unlike the cosmolene coating found on military items in dead storage. It was a 10 minute job on the stripping wheel to remove the varnish from the scales and smooth down some of the sharp edges on the woodwork. I left the varnish on the metal for the time being.

The knife is not quite full tang. Despite this, there seems to be enough tang to give the knife sufficient strength to allow hard use. The tang is about 3/4 as wide as the scales and it ends just after the last rivet.

The leather sheath which comes with the knife is not ideal. Although well-made from an oily black leather, the sheath is a deep pocket, mountain-man type which completely envelopes the knife almost to the pommel. The sheath also has slit-style belt loops which in certain circumstances would allow the edge of the blade to come into contact with the wearer's belt. The design of the sheath is what it is, but isn't my choice of design. I have since re-sheathed this knife in a brown leather traditional hunting style sheath which is more to my individual liking.

So is it sharp out of the box? It's sharp enough for most users. It is a well-done convex edge which will strop up OK to achieve its definite hair-popping potential. Made from good Swedish high-carbon steel, the 114mm blade is just thick enough at about 3mm to allow the knife to be used for more heavy duty tasks than simply processing game. The knife comes with a lifetime guarantee against breakage under normal use. Sorry to say to those folks who have watched too many American YouTube videos, batoning Aussie hardwoods with this knife is not something one would expect to be covered under "normal use" and I wouldn't recommend it.

The knife might be rough as guts, but it's a tool designed for the serious user, like the roo shooter or NZ deer hunter. Everything about it exudes function over form. It's like someone took an early 19th Century trade knife and riveted on the handle of a steak knife out of the kitchen drawer. A show-off knife it is not.

I've carried it for a few trips and have found it to be light and unobtrusive, which is exactly how I prefer a sheath knife. As a multi-purpose camp tool it well and truly does the job - food preparation, carves feather sticks, cuts cordage. I did not spend hours dulling the edge by cutting pieces of paper so I have no idea how well it performs that vital task as seen on countless "bushcraft" YouTube videos.

Ιf the knife interests you, where can you purchase Svörd's Economy Series Drop Point Hunter? In Australia at time of writing, prices for this knife vary, Edge with Cutting Knives and Outdoor Accessories cheapest at A\$66 and Fusion Gear being the dearest at A\$84.99 before shipping costs have been factored in. The knife can also be found on eBay for around A\$67 shipped to Australia from a United seller.



Alia from a **Svörd Drop Point Hunter**States-based **Knife in alternate after**market leather sheath

So is the knife worth the money? In my opinion the answer is a resounding yes. It's an honest and unpretentious tool with traditional styling and design, made from steel, timber and brass. It will cut just about anything you need to cut with it, it holds an edge OK and in the event you need to give it a touch-up, the convex edge means you can literally strop it back to shaving sharp with the leather belt you are wearing. The rough finish is seen by many to be a deal-breaker, but even though it's not a pretty knife there's no reason it couldn't become the basis for a project knife. It would definitely be a case of making a silk purse out of a sow's ear.

GEAR REVIEW: ORD RIVER QUART POT



Product description from Ord River:

"Stainless Steel Ord River Quart Pot. 2pc with collapsible handles. Fits easily inside each other, compact design. 5" tall x 4.5" wide x 3" deep. Great for trail riding and camping."

REVIEW BY C.A. BROWN

he quart pot, also known as the bush pot, is as traditionally Australian as a billycan, but twice as useful. It's essentially a smallish billycan with a cup that fits inside, forming a close-fitting lid.

Traditionally the Aussie quart pot was made from soldered tin-plate or copper, but they are now also available in seamless, drawn stainless steel. Typically a quart pot has an oval cross section, which is useful for a couple of reasons; it reduces the bulk of the quart pot, making it easier to pack or to strap to your saddle. The oval cross-section also increases the surface area in contact with flame and decreases boiling time, but more on that later. The quart pot we are reviewing here is the Ord River Quart Pot. It's constructed from drawn and rolled stainless steel so there are no soldered seams to burn out and leak or leach nasties into your tea. There are no rivets since the

handles are spot-welded in much the same way as a US army butterfly-handled canteen cup.

Although a quart pot is so-named because its capacity is supposed to be a quarter of one Imperial Gallon (approximately 1.1lt), the Ord River quart pot cheats a bit by fudging the numbers. The main pot has a capacity of 750ml and the companion pannikin (cup) has a capacity of approximately 300ml, bringing the total combined capacity of the quart pot and pannikin to 1.05lt.

Back to that oval cross-section. Since the quart pot boils most effectively when placed right next to the campfire rather than sitting on top of it, the oval cross section increases the surface area. The quart pot will come to a rolling boil with flames on one side while the folding handles remain cool to the touch on the other side of the quart pot.

The pannikin is sat on top of the pot as a boil cover, which decreases boiling times. The size of the pannikin is just enough for a good cup of coffee, tea, hot chocolate or soup.

Being stainless steel rather than tin-plate or copper, the Ord River quart pot with pannikin is no lightweight at 337g. It's also not all that heavy, so it's a good choice for the outdoors enthusiast who appreciates the traditional benefits of the quart pot over the billycan.

First impressions upon seeing this quart pot in the flesh for the first time were "it's a bit smaller than I'd imagined". This is because the scant marketing materials are vague about the size of the quart pot. I actually thought it would be a quart-sized pot as per tradition. Despite this, it's proven to be a worthy addition to the bushwalking kit. It's been used as the primary boiling and drinking vessel out bush for the past few months and has done an admirable job. In fact, it's replaced the canteen cup as primary boiling vessel.

One neat feature of the quart pot is that when the pannikin is pressed into place it completely seals the pot. Being big enough to carry a brew kit and Trangia burner, or a dehydrated meal and some extras, you can seal it up tight then store the quart pot upside down to keep your tucker, tea or coffee dry through the worst weather.

Aside from use on an open campfire, the quart pot has been successfully brought to the boil

on a butane-fuelled MSR Pocket Rocket cooker, on a Trangia Mini metho stove on a Swedish Army Svea metho stove using the Svea's accompanying windshield/stand, and on a White Box sideburning metho stove. It would work just as well on other bush cookers as diverse as the classic folding hexamine stove and the high-tech woodburning, electricity-generating Biolite stove.

As with all such vessels when used on an open fire, the quart pot will become covered in soot which can transfer to the inside of your pack or belt pouch. You can purchase a traditional leather quart pot holder, but this adds extra weight and is more horse tack than bush gear. The simplest solution is to store your quart pot in a calico, nylon or plastic bag inside your pack.

So where can you purchase one of these quart pots? The item reviewed was bought from a local brick and mortar saddlery and was a special order. Cost was A\$39.99 and there was a two-week wait. The Ord River Quart Pot is available from various online retailers for between A\$35.95 and A\$65.95 plus postage. Note that unlike the various online product photos the pot does not have "Ord River" graphics engraved.

Other brands of quart pot such as the RM Williams "Bush Pot" are also available, and these are the more traditional type with soldered seams and tin-plate or copper construction. You can expect to pay from A\$65 to A\$80 for a good one.



The well-used Ord River Quart Pot separated to show the two components of quart pot and pannikin.

GEAR REVIEW: BRITISH ARMY 1944 PATTERN WATERBOTTLE SET



Item description from UK Army Pamphlet "The Pattern 1944 Web Equipment", 1946:

"The waterbottle is of aluminium with screw stopper and aluminium cup on the base; the bottle has a capacity of one quart and the cup one pint. The waterbottle cover is a 'bag' type to take the aluminium waterbottle and cup. A pocket is provided inside on the back wall for the filter bag and has a small flap which prevents the bottle catching the top of the pocket; a web loop is fitted inside to take a tube of sterilizing tablets; the bottle is retained in the cover by flaps over its shoulders secured by snap fasteners. On the back a 'hanger' hook is fitted for attachment to grommets on the waistbelt."

s far as aluminium water bottles go, people either love 'em or hate 'em. I've used SIGG bottles as well as vintage US army aluminium canteens, and of course we've all drunk out of aluminium cans at one time or another. Current scientific thinking on the apparent relationship between Alzheimer's and aluminium is mixed - at first aluminium was almost definitely a cause of Alzheimer's, then it probably wasn't, now it might be again. It all depends on whose line the scientists in question are pushing at whatever time. I can say that I have no problem drinking water out of a vintage aluminium water bottle such as this because I don't drink out of it

every day, only on bushwalking trips, which occur only every second weekend or so. Consider this unusual intro to a review as a caveat... if you think you're going to get Alzheimer's from a waterbottle like this because it's aluminium, then this isn't the canteen for you.

Back in WWII the British Army (and Australia by default) were still using waterbottles made from heavy-gauge enamelled sheet iron. These were bombproof, and had a capacity of 2 pints (approximately 1200ml) but they were heavy and prone to rusting inside and out. Since 1910 the Americans had been using an aluminium and later, stainless steel canteen which came



The 44 Pattern Waterbottle Kit with some additions for modern bush use. Clockwise from top left: 44 Pattern Waterbottle, 44 Pattern Cup, Modified US canteen cup stove/stand, repro 44 Pattern Waterbottle Pouch, 1945-dated Milbank Filter Bag, Small Ziplock Bag containing Aquatabs Water Purification Tablets.

in a self-contained unit of pouch, canteen and nesting aluminium cup. It was a good system and far better suited to jungle warfare than the old enamel bottles used by British and Empire troops. The only problem was the capacity. The American bottles held only 1 US quart (950ml) and this was deemed not enough.

In 1944 a British prototype water bottle was released which was similar to the American canteen, but had a 2 pint (1200ml) capacity like the enamel bottles. It also came with a nesting cup and a special US-style webbing belt pouch. Released too late to see action apart from with some SOE parties in Malaya just before the war's end, the new waterbottle was brought into general service in 1946 as part of the British Pattern 1944 equipment. In the British army the 44 Pattern waterbottle soldiered on for decades alongside the later plastic 58 Pattern bottle. Unlike the

58, the 44 Pattern bottle had a cup you could actually cook and brew tea in. The 44 Pattern has all but disappeared from military service with the introduction of the stainless steel Crusader cup for the plastic 58 Pattern waterbottle in the 1990s.

It's old, it's obsolete and it's hard to find, so why would we be interested in something as obscure as the British 44 Pattern waterbottle set? There's a few reasons - like the later 58 Pattern (without its cup) the 44 Pattern bottle and cup will fit all US and Australian 1 quart canteen covers. Even at the height of an Australian summer, water drunk from the 44 Pattern bottle is cool and just tastes better. Maybe it's all those Alzheimer's-causing aluminium particles? Besides, as long as you remove the neoprene O-ring and the capretaining cord, you can boil water in the bottle itself, making the set useful for tasks such as distilling salty or foul water to make it drinkable. The bottle

has a 1200ml capacity versus the 950ml capacity of a standard US or Australian plastic canteen and the light aluminium construction means it's not all that much heavier. The 44 Pattern bottle and cup gets more of a run out bush these days than my green plastic army canteens or Nalgenes.

I mostly use the waterbottle with an Aussie auscam canteen pouch with sewn-on hexy stove pocket, but the original issued pouch is workable too. It holds the bottle, cup, a modified US canteen cup stove/stand, a canvas Milbank filter bag and a packet of water purification tablets. If you were sure of your water sources you could easily instead carry a folding hexy stove, tablets, lighter and brew kit in the Milbank bag pocket.

What are the downsides of this set? There are a few. You'll need to actively collect all the components separately and a set could cost you up to A\$100. Even if you can find a bottle, chances are a cup will elude you. The early bottles with a stainless steel cap are easy to cross-thread and will screech loudly when opening and closing, yet if you find a later bottle with a black hard rubber cap, you'll discover that it leaks and that the caps aren't interchangeable. Most of these old bottles are dented to varying degrees and if you were to try the tried and true method of removing dents from aluminium SIGG bottles - filling with water and freezing overnight since water expands when frozen, theoretically popping out dents from the

inside - you'll discover just how easy it is to split a 44 Pattern bottle.

The cup problem can be easily overcome by purchasing a very cheap French Aluminium Model 1952 canteen cup and carefully hammering it into the correct shape with a mallet and a couple of suitably-sized bits of wood. You can pick up a French canteen cup from Aussie Disposals for under A\$10.

Availability of the rest of the kit is mixed. Aquatabs are available anywhere, and Milbank filter bags can be had at disposals stores and elsewhere online. At time of writing 44 Pattern cups are stupidly expensive to buy by themselves, leaving you with the French cups as the only real option. The bottles are available as army surplus and vary in price from US\$50 for one bottle shipped to Australia from online retailer What Price Glory to US\$50 for two Danish Army surplus but Britishmanufactured 44 Pattern bottles shipped to Australia from US online retailer Numrich. Repro 44 Pattern waterbottle pouches are available on eBay for around A\$26 shipped to Australia, but you'd do just as well with an Aussie or American canteen pouch.

Despite all this, the 44 Pattern is a great waterbottle which gives you lots of options - high capacity, boil-in-the-bottle capability and it integrates easily with just about all army surplus and after-market waterbottle pouches out there.

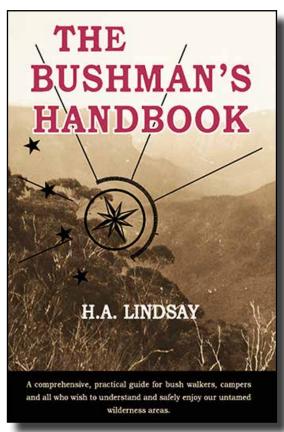


Original 44 Pattern cup on the right, dirt-cheap French Mod. 52 canteen cup on the left - beaten into submission to fit the 44 Pattern bottle. The black on the rim of the 44 cup is simply a strip of electrical tape to stop burnt lips.

BOOK REVIEWS

This issue we review H.A. Lindsay's *The Bushman's Handbook*, Bob Cooper's *Outback Survival* and Milo Dunphy's long out-of-print classic *The Rucksack Bushwalker and Camper*.

BOOK REVIEW: *THE BUSHMAN'S HANDBOOK*H.A. LINDSAY, 2013 REPRINT



"A comprehensive, practical guide for bush walkers, campers and all who wish to understand and safely enjoy our untamed wilderness areas."

REVIEW BY C.A. BROWN

hapter 1 of The Bushman's Handbook opens with a simple premise;

"There is nothing mysterious or

"There is nothing mysterious or marvellous about bushcraft. To become a good bushman, you master a thousand and one little tricks whose main feature is their utter simplicity..."

That just about sums up Lindsay's masterful approach to bushcraft and bush survival.

Back in the 1950s and 60s HA Lindsay was a prolific writer of adult and juvenile fiction as well as non-fiction works dealing with naturalist and Aboriginal topics. He was also the subject of much scorn and outrage after the publication of his 1948 book *The Bushman's Handbook* due to the nearly bombproof animal and bird trapping methods described.

Containing the distilled knowledge of Lindsay's years as the Australian Army's chief combat survival and bushcraft instructor during World War Two, The Bushman's Handbook remains one of the top books on the topic of Australian bush survival due to the straightforward, no-nonsense advice given within. Well-known Canadian bushcraft and wilderness survival instructor, naturalist and author Mors Kochanski

even includes *The Bushman's Handbook* in his top 10 bushcraft and outdoors books. Many other well-regarded Australian and overseas outdoors books reference *The Bushman's Handbook* from Tristan Gooley's *The Natural Navigator* to the Australian Army's 1987 training pam *Survival*.

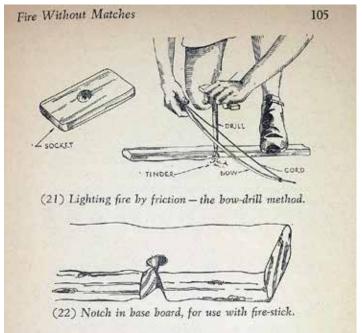
According to the table of contents, the book covers - finding water in scrub country; finding water in forests; guides to water; fresh water from salt; finding food; snaring game; catching fish; food in unlikely places; wild vegetables; fire without matches; camping; cordage and thatching; tracking and direction finding; keeping healthy; what to carry and more. The subject matter in the chapters of the book and the order in which they appear are taken directly from the author's wartime bushcraft training syllabus, which was designed as a step-by-step progression for turning the city-bred 1940s soldier into a novice, but competent bushman.

The book is profusely illustrated with easy to understand line diagrams and drawings, but the well-written descriptions and explanations are the real meat of the book.

Perhaps the most useful and important parts of the book are those dealing with water procurement and purification. In these sections Lindsay gives techniques, tips and tricks to help the reader obtain a drink under all but the most dire and deadly environmental conditions. He details methods for getting water from dew, from the roots of certain widespread species of trees, from the trunks of certain species of saplings, from jungle vines, how to separate fresh water from brine in sand dune country, animal and bird guides to water and even distillation of drinking water from mud or the damp soil under a rock.

Unlike his contemporary, Richard Graves of The 10 Bushcraft Books fame, Lindsay's The Bushman's Handbook focuses only on survival and self-extraction rather than on making furniture and other more "crafty" topics. It's a no-nonsense remote area survival handbook.

Having owned an original 1948 First Edition as well as a 1963 Sixth Edition, it's clear that the 2013 reprint is a facsimile of the 1963 edition. It has the exact same page count and since originals are becoming quite expensive, the publishers are to be lauded for their efforts in making this important work more easily available



For the bow, cut a finger-thick stick of strong, flexible wood two feet long and fit it with a slack bowstring of strong cord or leather thong. For the top bearing, take a piece of hardwood, shape it to fit the hand and in its centre bore a hole to take the top end of the drill. This upper bearing must be lubricated with soap, fat, lead from a pencil or, if nothing else is available, by rubbing it on the sweat-glands of the nose. That same end of the drill must always go into the top bearing.

Put a pad of teased bark or dry grass on the ground and place the notch of the base board above it. Hold the board down with the left foot, kneel on the right knee, take one turn of the bow cord around the drill, put the bottom end

This page from the 2013 reprint's chapter on Fire Without Matches nicely illustrates the concise writing style as well as the easy-to-follow illustrations found in the book.

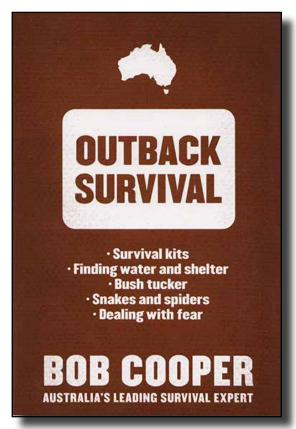
to the general public.

At time of writing the 2013 reprint can be found on eBay, Amazon.com and the Angus and Robertson books website for between A\$18 and A\$31.99.

Prices for original editions vary from A\$25 for a good 1976 edition to around A\$35 for an okay 1963 edition. If you can find a 1948 first edition or a 1951 second edition you can expect to pay up to A\$70 for one in average condition.

For further information on HA Lindsay's wartime bushcraft and survival training syllabus and methodology which inspired *The Bushman's Handbook*, see the article this issue on WWII Bushcraft Survival Training. For more info on HA Lindsay himself and the controversy caused by the publication of this book, see the profile on HA Lindsay in a forthcoming issue of Australian Bushcraft Magazine.

BOOK REVIEW: OUTBACK SURVIVAL BOB COOPER, 2012



"Survival kits
Finding water and shelter
Bush tucker
Snakes and spiders
Dealing with fear"

REVIEW BY C.A. BROWN

ob Cooper is a bit of a legend in the Australian bush safety and survival training community. The Western Australian has been teaching the topic since the early 1980s and aside from his own successful training school, Bob Cooper Outback Survival, Cooper has also worked with and trained the Australian Army's elite Special Air Service Regiment.

His author bio reads as follows:

"Bob Cooper's incredible bushcraft skills have been developed through more than 25 years of experience in the outback. He has picked up tools of survival from the experiences of living with traditional Aboriginal communities, instructing with Special Forces Units, lecturing with the Texas Parks and Wildlife Service on desert survival in the Mexican Desert, delivering wilderness lessons in the UK and learning the skills of the bushmen of the Kalahari Desert in Botswana. Bob has put his own lessons to the test, dropping himself off in the 42C heat of the Australian desert with only

a map and soap box sized survival kit, no food, water or sleeping gear, and a 10 day walk across 160km of rough terrain back to safety. He did this alone and showed that with the right knowledge of the land, you can survive."

Outback Survival is not only packed with no-frills real-world survival skills and knowledge, it's also full of good yarns, from Bob's early steps into the world of bush survival to his acceptance into and successful completion of the Special Air Service Regiment's selection course - as a civilian no less!

With the book's apparent focus on dealing with fear and winning the mind-game during a crisis, Bob gives several hair-raising examples of times his own life was in real jeopardy and punctuates these anecdotes with real-world case studies of various remote area tragedies which illustrate just how quickly things can go from bad to worse if fear is allowed to creep in and take over.

Aside from the yarns and case studies,

Outback Survival provides a wealth of remote area survival techniques which focus most on water procurement, signalling and travel as a component of self-rescue.

There is little focus on primitive methods such as fire by friction since Bob Cooper espouses a "survival kit" philosophy and assumes that the survivor will have with him or her at least a Bic lighter, matches or a ferro rod to help get him or herself out of trouble. It's not a bad philosophy, just one which doesn't quite gel with the modern bushcraft community and that's quite okay since *Outback Survival* is not a bushcraft book, it's a serious remote area survival handbook written by an acknowledged master in the field.

Following Cooper's logical training progression honed over more than 25 years of teaching outback survival, the book covers the following topics in the following order -

- Control (controlling the psychological aspects of survival);
- Cooper's big 5 priorities (water, warmth, shelter, signals, food) and how to assess them;
- Dealing with dehydration;
- Finding water;
- Warmth;
- Fire;
- Shelter;
- Distress signals;
- Food requirements in a remote area survival situation;
- Survival planning;
- Coastal survival;
- Desert survival:
- Natural navigation (using sun, moon and stars):
- Information about Australian snakes (the author is a snake handler);
- Dealing with bites and stings;
- Dealing with blisters and chafing when on the move.

At 20cm x 13cm the book is light and compact enough to fit into a vehicle or aircraft survival kit and it's certainly compact enough to throw into a day pack for a day or weekend of practicing the various techniques..

The book is still in print and can be found online from various retailers from the ABC Shop

then save time, energy and sweat by looking for some other water indicators which may give you a clue to start you off in the right direction, observations such as the downhill topography where waterholes usually form, birds' flight paths and flying patterns to and from water, bird calls from a static area, taller and greener trees. Use these observations to start you in the right direction until you find the Y junction of trails which will give you a positive direction.



WATER-PROCUREMENT METHODS

If you can't find a water source now is the time to get clever and use what you have available to make water. There are several methods to use and each has its merit and could be the life-saving skill you need in a real survival situation. So practise these to be competent and confident for when it really could mean the difference between life and death.

Transpiration method

I have placed the transpiration, or 'bag over a tree branch', method first on the list because it is easy to do - all you

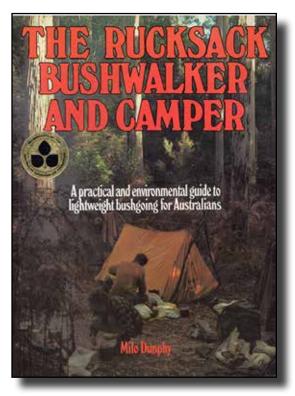
74 OUTBACK SURVIVAL

This page from the sections on water indicators and water procurement methods shows the writing style and some of the illustrations found in *Outback Survival*.

to Amazon.com. At time of writing prices vary from A\$19.95 to the Recommended Retail Price of A\$24.99 to A\$32.99. However, if you pick up a copy from the author's website www. bobcoopersurvival.com, you'll pay A\$24.99 for a signed copy, which is a great deal. If you prefer to read your books on electronic devices such the Kindle, iPad or Android tablet the book is available at the Kindle Store for \$12.99.

Keep an eye out for more on Bob Cooper, his survival products and his training school in future issues of Australian Bushcraft Magazine as we profile the man himself, review his Basic and Advanced survival courses in Victoria and the Kimberley and review his other products such as Mini Survival Playing Cards and the Bob Cooper Survival Kit.

BOOK REVIEW: *THE RUCKSACK BUSHWALKER AND CAMPER*MILO DUNPHY, 1980



"A practical and environmental guide to lightweight bushgoing for Australians.

Recommended by the Australian Conservation Foundation"

REVIEW BY C.A. BROWN

ilo Kanangra Dunphy was the son of pioneering Australian conservation activist and bushwalker Myles Dunphy. With this pedigree, it's not surprising that Milo Dunphy not only absorbed and reflected his father's environmental activism streak, but also that his bushcraft would be top notch. Milo's first big trip out bush was with his parents at the age of 20 months when they bundled him onto a specially strengthened and outfitted pram dubbed the "Kanangra Express" which was pushed and pulled over the rough bush tracks to the Kanangra Walls.

According to his bio on the Wikipedia page he shares with his father:

"Milo Dunphy was an activist who campaigned on several fronts. He was known for his work in the preservation of the Colong Caves, which were being targeted for limestone mining, and also for his contribution to the preservation of the Boyd Plateau, which was to be planted with lime trees. He helped to double the area of

national park space in New South Wales from 2 to 4.5 percent.

Milo Dunphy stood as a candidate in the 1974 federal election, as a candidate for the Australia Party for the Division of Cook; and in the 1983 federal election, as an independent candidate for the Division of Bennelong against John Howard, at that time Treasurer (and later Prime Minister).

Dunphy Jnr. was active through Australian conservation organisations including the Australian Conservation Foundation, the Colong Foundation for Wilderness, the Nature Conservation Council, and the Total Environment Centre, of which he was the founding Director.

He was appointed a Member of the Order of Australia in 1986 for services to conservation, the Sydney Luker Award from the Australian Institute of Planning, and an honorary degree from the University of New South Wales."

Diagnosed with terminal liver cancer, Milo Dunphy died in 1996 at the age of 67. In his

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obituary in the ACT National Parks Association Bulletin he was described thusly by colleagues Geoff and Den Robin: "

To be with Milo in the bush was to experience his extraordinary bushcraft and knowledge and to share his sense of peace and wonderment. He could find water in a drought, light a fire in a deluge, or reach a pre-determined campsite in a fog at the end of a long, hard day."

Milo Dunphy's 1980 book The Rucksack Bushwalker and Camper is packed with that very same knowledge and bushcraft. Written at a time when recreational bushwalkers were in the process of ditching old-style japara and canvas gear for modern plastic and nylon and were starting to rely upon their disposable income rather than skills and knowledge to ensure a comfortable and successful outing, the book stands as a time capsule of sorts, an instruction manual on bushwalking and camping in the old style in a simpler fashion without that ever-expanding bubble of technology which serves to insulate modern outdoors-goers from their environment to the extent that most barely interact with it at all.

The publisher's blurb on the back cover does the book justice:

"Milo Dunphy has brought a lifetime's experience of trekking to the writing of this complete guide to bushwalking. Crammed with a multitude of facts and personal hints, this is an invaluable handbook for beginners, bushwalking clubs and experienced party leaders..

The author's renowned authority in this subject is here combined with his deep love of our country and our wilderness heritage, such that this book has at its very core a tangible awareness of conservation realities yet, at the same time, how we can all go about actively enjoying them.

Ranging over an enormous variety of facets of the practical, commonsense way to go about lightweight camping under any conditions, the author explains not only such basics as how to light a fire, set up camp under different conditions and for a differing number of people, pack a rucksack, carry a billy, but also extends his bushgoing advice into such very-real situations as bushwalker's etiquette, coping with buffalo and wild steers, and treating the many health hazards you may be faced with."

In prolonged heavy rains the tent walls will ooze water, so attention must be paid to the pain between the odge of your groundsheet and the wall (which is tucked under the jointsheet). Turn the wall of the tent under the groundsheet. Turn the edge of the groundsheet. Turn the edge of the groundsheet hack over itself to form a raised ofge. Such a detail will prevent the groundsheet has a such a second will be grown to grow the groundsheet on a stick. The detail can be improved by flanging up the edge of the groundsheet on a stick that also the wall, or by using boots, waterbottle, and the like to achieve the same efficiency in the grown of the wall of the wall of the sight, low you're waterproof for the night, low. If you wall not material, the set there's one more job for the well-organized bushwalker as rain threatens. He are globely depth will be the grown to the tent ready to hand for a guick start to breakfast.

INSULATING THE BED

INSULATING THE BED

Most people automatically expect to be able to climb into a sleeping bag and go to deep with nothing clue between them and the ground than a single thickness of geomethete. Well, some can, Indeed, most people can if they're itself enough, but which they are still asleep at 2 a.m. is another matter.

The fact is the humans body at normal body heat requires insulating from ground surface temperatures of from 16.7% down past zero. However in Arnhem Land a goostobeet on the ground is all you need a certain periods of the year. There are fine ways of providing insulation in the Australian bush: by the natificial bed of leaves, bracken, bushes or grass; the dosser's bad of newspaper; a roll of foam insulation carried for the purpose; by assembling spare clothing as a bod in top of the groundsheet; and by using an inflatable air mattress, probably is conjunction with a little spare clothing.

But of never 1 the art of arranging a bed of leaves seems to be dying out among bush-miker. This is partly due to the need not to destroy natural growth or even not to disturb deadfalls in the decreasing areas of naturalness subject to increasing human pressures. It may also be due to the use of modern down sleeping bags and the in-creasing use of fearm bedroils. Bed of leaves. The art of arranging a bed of leaves seems to be dying out among bush-

reasing use or seam occurrent.

However there are still many areas of Australia where it does not hurt to gather
does leaves from a fallen tree for your bod. Similarly dead bracken can be gathered,
or live bracken where it is profuse. Park managers can scarcely complain about the or line bracken where it is profuse. Fack managers can scarcely compania about the use of a tiny amount of bracken when their so-called 'fine hazard reduction' programmes are designed to remove the underbrush and litter over hundreds of thomas of bectares. In national parks there are regulations to be observed; however, in Crown lands the decision as to whether to gather a bed or not effectively rests

with yoz.

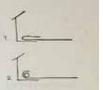
No person these days should cut green bushes for a bed anywhere. I read an article by a well-known photographer in Ourdoors in which the author says he cuts green freeds from a blackboy for a bed. What a thoughtless thing to do to a shrub that could be 200 years old. Drovers and bushmen in pioneering Australia used to cut branch and support its but in a forked stump. Having destroyed two-thirds of Australia's forests we can't afford to perpetuate such predligate habits.

Another traditional bush mattress is enade by carefully turning a mat of spinifex were and putting down your bed rell on it.

over and putting down your bed roll on it.

Take a groundsheet with you when assembling a bed. Lay the groundsheet flat on the ground where you are going to gather your bedding. Break off dead wigs of up to 35 mm in dismeter, complete with leaves. Transfer each twig to your left hand and them in dismeter, complete with leaves. when you can hold no more, transfer them to the groundsheet with the butt ends of all the wigs pointing in the same direction. When the groundsheet is stacked with material gather up the corners and carry it back to your tent.

Now stack the twigs on the ground inside the tent, starting at the head of the tent









If you brush against the inside of a wet tent you may cause water to drip through. Gently train the drips down the slope with

This page from The Rucksack Bushwalker and Camper captures the spirit of the book - commonsense oldtime bushwalker's bushcraft tempered by a strong environmental conservation focus.

Written as a true bushwalker's handbook of its time, The Rucksack Bushwalker and Camper contains a wealth of information on everything from equipment selection to camp kitchen to trip planning. One of the greatest sections is titled "Bushcraft", and is not about the more common survival-style bushcraft we know today, but covers bushman and old-style bushwalker knowledge on topics such as walking styles, scouting ahead, party sizes, stock routes and tracks, maps, bush markers and signs, route-finding, bush huts, caves and rock shelters and navigation.

The book has been out of print since the 1980s so it can be difficult to find a copy. Best bet is to try online. At time of writing there are a few copies out there on eBay and on the Abe Books website. Prices range from A\$18 to about A\$25, but it looks like copies are drying up. If you wish to read it and can't find a copy to purchase online, try your local library, a brick and mortar book exchange or a second hand book shop. It's worth tracking down to add to the bookshelf.



BUSH TUCKER WILD PLANT FOOD -SAFETY FIRST.

BY C.A. BROWN

here are only a few Australian plant species which can be regarded as deadly poisonous, but many can be considered as dangerous or harmful. Since there are always exceptions to the rule when it comes to identifying edible plant species it's difficult to lay down solid ground rules.

General guidelines to follow include:

• Sap from trees, bushes vines, etc. should be kept away from eyes, skin and mouth.

Australia's wild plant foods have helped to support vibrant communities of human beings for tens of thousands of years, but not all plants are edible and of those that are, some require very special treatment to leach out toxins before they are safe for human consumption. Mushrooms and fungi are of course a highly specialist area and shouldn't be consumed under any circumstances unless 100% identified and verified as edible.

- White or milky sap is often poisonous, irritates the skin and can be associated with toxic fruit, although there are always exceptions to the rule - e.g. wild figs.
- The fact that birds or animals can safely eat a particular species of wild plant food is not proof that it is safe for human consumption since birds, mammals and reptiles can eat items of plant food which will make a human being violently ill.

Since there's no failsafe reliable method of determining edibility for an unknown plant, the best method is to learn a few confirmed edible species for a given area. For example, up and down the east coast of Australia there are some safe wild food plants which are very common and while not fully nutritious, would help to keep you alive during a long-term ordeal. These include:

Lomandra Longifolia - Common name is Spiny Mat Rush. Edible parts of this plant include: white leaf bases - edible raw or boiled and taste like green peas; flowers - edible raw; seeds - ground into a paste while wet, then roasted into a johnny cake.

Xanthorrhoea Spp. - Common names are grass tree, kangaroo tail or black boy. Edible parts of this plant are the white leaf shoots which may be harvested without harming the plant and which taste like raw celery.

Trachymene Incisa - Common name wild parsnip. Edible part of this plant is the thick, juicy tap root which is edible raw or cooked and is particularly tasty. The root is quite deep, and so requires some work to extract, but the plant is quite common across its range.

Plantago Spp. - Common names are native plantain and sago weed. Edible parts of this plant include: seeds, which when crushed and mixed with water give a filling porridge type meal; and the leaves which can be blanched in boiling water and eaten.

Typha Spp. - Common names are bulrush or cattail. Edible parts include - the pollen, which can be steamed or baked; the young flower-stalks can be eaten as salad in much the same way as celery; the root stems can be gently heated to extract a large amount of starch which can be baked into a damper or johnny cake.

No photographs or further information on these species are included here as it is hoped the reader will undertake his or her own research and/ or seek competent assistance in identifying these plants in their natural environment.

The Australian Army has developed what it calls the "Taste Test" which is strictly reserved for worst-case situations.

The taste test is to be used only in the most dire of emergency situations since it is far from being infallible. There are several species such as the Burrawang palm which will easily pass the



Poisonous. *Macrozamia communis*, the Burrawang palm. This cycad has large starchy nuts which are reportedly delicious, but are highly toxic unless specially prepared. The plant has been responsible for many poisonings.

army's Taste Test, but which are highly toxic and can kill if consumed in quantity unless properly processed. The information is presented here for reference only.

Remember - if you cannot positively identify the species and verify it as edible, it should be regarded as toxic and avoided.

The Army's 1987 Training Pamphlet *Survival* describes the Taste Test -

"The Taste Test is a controlled, gradual introduction of an unknown species into the body's system. Throughout the period of introduction, close observation should be kept for any abnormal reaction. If there is any reaction, the species should be discarded.

The army's Taste Test is made up of the following steps:

Step 1 - Smell: The leaves of the plant should be crushed and smelt. If an almond or peach smell is evident, it may be due to prussic acid, and the species should be discarded.

Step 2 - Touch: A small amount of the fruit should be rubbed lightly on an area of tender skin (e.g. under the arm). If irritation or rash results, the species should be discarded.

Step 3 - Taste: The food should be touched with the lips, the corners of the mouth and the tip of the tongue. If there is no reaction after two minutes, a small amount can be chewed and spat out. If any irritation or an extremely bitter taste results within 30 minutes, the species should be discarded.

Step 4 - Eating: If possible, the food should be boiled in several changes of water before swallowing. Only a small portion of the species should be chewed and swallowed. The food should be discarded if within 4 hours it produces

- (1) a sore mouth, tongue or throat;
- (2) repeated belching;
- (3) nausea or sickness;
- (4) hallucination or dizziness; or
- (5) pain in the lower stomach or abdomen.

Everyone knows about the "Rule of Threes" which states that a person can only survive 3 minutes without air, 3 days without water and 3 weeks without food. That last bit is a little inaccurate, since in survival situations people have lasted far longer than three weeks without eating - even when forced to travel long distances or do hard manual labour.

It is interesting to note that in the last 100 years there have been no verified fatalities from starvation among people lost or stranded in the outback or the Australian bush. By and large, any fatalities have been the result of dehydration or injury. With this in mind, is food such a big priority in a short-to-medium term remote area survival situation? It's something to ponder.



Poisonous. Alocasia brisbanensis, commonly known as the cunjevoi. This is one of the most toxic native plants to be found in Australia and people have died from ingesting it. A related species is sometimes used as an emergency food source in the Pacific islands (after much processing), leading to potentially deadly confusion about the possible food value of Alocasia brisbanensis.

TRIP REPORT

2-NIGHTER SWAG WALK

BY C.A. BROWN

n this issue's "In The Old Style..." we made some pretty lofty claims about the advantages of using a traditional Aussie swag as a bushwalking load-carrying system.

Talk is cheap, particularly if the talker has zero practical experience of the subject he or she is talking about, so here's an account of a recent two-night bushwalking trip using the traditional swag in place of a backpack.

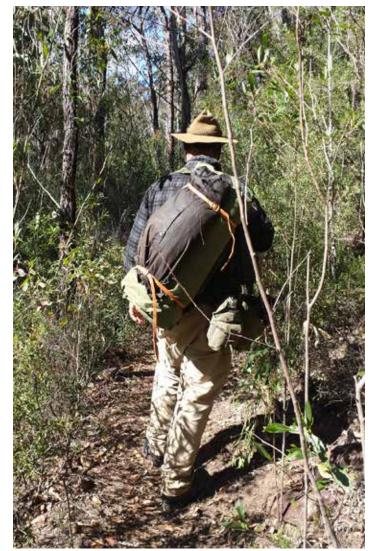
It wasn't my first swag walk, but it was my first one in winter. The temperatures in this part of the country in early July will often drop below zero at night, so whereas the last swag walk took place during nice and warm early Autumn, this one would require some more planning to keep the load manageable. You see, the idea was to avoid plastic and nylon equipment as much as possible and rely on good old canvas, leather, wool, cotton, down and rubber as far as possible.

The trip was planned as a two-nighter, with a static camp near the start point on the first night to get the cold weather camping aspect sorted, while the carry phase would begin the following day with a brisk 12km walk down the Starlight's Trail in the Nattai National Park in NSW. The route in would take us via Ahearn's Lookout, then we'd backtrack and head down Starlight's and onto our campsite at Macarthur's Flat on the banks of the Nattai river. The return walk would only be a scant 8km, although mostly uphill.

The Explore Australia website describes the Starlight's Trail walk as:

"...essentially a bush-camping site by the Nattai River, reached via the 12 km return Starlight's Trail, which begins and ends in the car park at the end of Wattle Ridge Rd. It's a strenuous walk for experienced, self-sufficient walkers only. Bring your own drinking water, food and up-to-date topographic maps."

Once the route was planned, it was time to sort out the swag. The swag chosen for this trip was a traditional type kindly supplied by



The swag slung. The dilly bag isn't visible in this shot, but you can clearly see the Terra Rosa Gear Woodcrafter's Swag with oilskin coat tucked under the leather swag straps.

Terra Rosa Gear in Melbourne. Specifically it was the Woodcrafter's Swag. Made from 8 oz. canvas, with hand-cut leather straps, the swag seemed perfectly suited for traditional carry. As a concession to the cold weather, bedding was a 1940s down sleeping bag. A light canvas dilly bag completed the swag carry system.

The first night I camped in a hidden grassy area in the bush at the top of the trail. There were a few trees around and plenty of firewood so the site gave some protection from the howling winds as well as the opportunity for a small campfire to cook some tucker and take some of the chill out of the evening air. Temps dropped to 3 deg C overnight but the down sleeping bag did its job, while the canvas of the swag kept the wind out.

Next morning was bright, clear and crisp. I met a friend, shouldered the swag and we hit



Swag, dilly bag and haversack.

the track. Despite the swag weighing close to 17kg, there was no discomfort as it was balanced almost perfectly. The swag was slung over the left shoulder only, while the dilly bag, with its strap tied off to the swag straps was slung over the right shoulder. Map case and a WWII webbing haversack were slung over the left shoulder as well. Around the waist was a leather belt with a waterbottle, sheath knife, pocket knife and compass pouch.

We headed for Ahearn's lookout for a lunch stop, then backtracked and rejoined the Starlight's Trail for the walk down into the valley. The terrain and the going varied from fairly wide fire trails to narrow scree goat tracks and overgrown bush tracks. There were half a dozen fallen trees on the track facilitating a scramble each time one was encountered. One of the main disadvantages often cited with using a swag is that the dilly bag can obscure the wearer's view of their feet, a serious concern when moving through complex terrain. Despite the scrambling over rocks and fallen timber, this wasn't an issue. Any time I needed to see my feet, I simply moved the dilly bag slightly and found myself with a perfectly unobstructed view.

After a couple of hour's walk we found

ourselves in the valley. After some discussion about whether we should camp at Macarthur's Flat, Emmett's Flat or the Cathedral campsite, we chose Macarthur's Flat. This is the nicest campsite in the area, a flat grassy plain dotted with black wattle trees and bracken. Unfortunately it had no water source other than the dodgy Nattai river, so water resupply would have to be done at Troy's Creek near Emmett's flat downriver and brought back to our campsite.

The camp was established in the late afternoon with shelter set up and campfire started. As per the previous night, the swag was set up as a bed roll. As the afternoon light grew dim the temperature began to plummet. Dinner was cooked and then it was time to hit the hay.

Overnight temperatures were in the early minuses as evidenced by the frost and ice everywhere the next morning.

The walk back up to the plateau was uneventful, but once again it proved the suitability of the swag format for this type of bushwalking. The Terra Rosa Gear Woodcrafter's Swag in particular proved a great success. It was warm, wind-proof and comfortable as a carry system. Highly recommended.



Part of the view on the way down the Starlight's Trail.

THE SWAG TRIP GEAR LIST:

Load-bearing Equipment-

Terra Rosa Gear Woodcrafter's Swag Dilly bag 37 Pattern haversack Leather belt Canvas waterbottle pouch Pocket knife pouch Svörd knife sheath

Shelter & Sleeping -

Rain cape groundsheet WWII down sleeping bag Army poncho

37 Pattern compass pouch

Clothing -

Wool jumper Wool gloves Beanie Oilskin coat Spare socks Spare T shirt Spare underwear Cooking & Eating -

Quart Pot & Pannikin Wire grill 44 Pattern canteen cup Knife, Fork and Spoon set

Water -

44 Pattern canteen 2-Pint Enamel water bottle Aquatabs

<u>Lighting & Misc -</u>

Swiss Folding Lantern & spare candles Match safe Svörd Drop Point Hunter knife Sheffield Locking Knife Vintage incandescent torch

Navigation -

MkIII Prismatic Compass and lanyard Rectangular Service Protractor Notebook and Pencils 37 Pattern Map case 1:25,000 scale topographic map of area <u>Food -</u>

Tin of Corned Beef 8 x ship's biscuits Hard cheese Salt pork Beef jerky Powdered egg Coffee Sugar cubes Chocolate Potato powder Surprise peas Tomato soup powder Chicken soup powder

ONLINE ROUNDUP

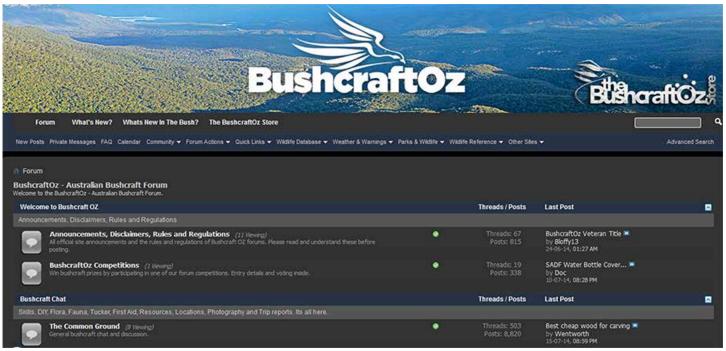
THIS ISSUE WE PROFILE THE BUSHCRAFTOZ FORUM

BY C.A. BROWN

http://www.bushcraftoz.com

"The BushcraftOz forum was created for Australian Bushcraft enthusiasts to discuss the skills, equipment, and knowledge involved in Bushcraft.

With a vastly unique array of flora and fauna species to rival anywhere in the world and considerably different climate and terrain, this forum aims to serve as a repository for Australian specific Bushcraft information."



The main page of the BushcraftOz Forum as it appeared in July 2014. Super-friendly and a great resource.

espite only being in operation since 2011, the BushcraftOz forum is now seen by many as the online spiritual home of Australian bushcraft. It a strong community of more than 1700 members, with hundreds of members and guests online at any given time.

Blake Muir, the founder and administrator of BushcraftOz originally started the forum as a repository for Australian-specific bushcraft information. It covers firecraft, bush tucker, tracking, hunting, fishing, shelter building, knife making, Australian flora and fauna, woodlore, equipment and more.

Unlike most of the "national" bushcraft

forums overseas like BushcraftUSA or BushcraftUK, BushcraftOz is not the tip of some corporate iceberg. It's a truly member-focused discussion forum with a small online store tacked on to help pay for bandwidth. It's the result of one bloke's passionate promotion of and support for our Aussie bushcraft traditions and for the growing community of Aussie bushcraft practitioners and enthusiasts.

Over the past three years the forum has gone from strength to strength, with a solid core of knowledgeable, experienced and friendly outdoorsmen and women from all over Australia. The forum includes sections on traditional bushcraft skills such as firecraft, water procurement

and purification, navigation, shelter & protection, ropes & cords and tracking, then adds primitive skills, photography, travel and the usual gear porn sections and reviews.

Aside from normal discussion, there are a couple sections of BushcraftOz which stand out as priceless resources. These are the Flora and Fauna Database and the Resources & Learning sections.

The Flora and Fauna Database is a collection of interesting and useful flora and fauna submitted by members. It may not be peer-reviewed, but each entry for a given plant or animal includes common and scientific names, distribution, habitat, field notes and usually a reference or two to prove the info is correct. It's a great resource for quickly looking up a given species.

One of the most useful sub-forums in the Flora and Fauna Database is the Wildlife Taxon Finder ("WTF?" for short). If you come across a species of plant, fungi, mammal, reptile, amphibian, invertebrate, bird or fish you can't identify through your own research, you can submit a post in the WTF sub-forum. Members have so far solved over a hundred WTF mysteries.

The Resources & Learning section of the forum covers websites, books, video and home study courses. Sure, a lot of it has an American focus, but you'll find gems in there such as YouTube links to the original pilot episode of *Bush Tucker Man* when old Les drove his NORFORCE Toyota Landcruiser rather than a Landrover 110. There is also a great discussion on books on Australian bushcraft and bush tucker, which has led to what I believe to be the largest bibliography of its type on Australian bushcraft literature.

Around May 2014 the forum underwent a revamp and added a series of online courses. Unlike other bushcraft courses such as those offered on the BushcraftUSA forum, the BushcraftOz courses are standalone, subject-focused projects. You won't get "certified" but you'll get all the resources and assistance required to learn a new skill or consolidate an old one.

The courses are broken down into two main areas - the Bushcraft Home Course and the Bushcraft Bush Course.

The Home course contains projects which can be practiced at home and includes making a simple damper, knifecraft, trip planning, navigation theory and even packing for an overnight walk.

It's a good system, particularly for those urbandwellers who cannot pencil as much bush time into their busy schedules as they may like.

One of the more interesting Home Course projects is the "Skycraft" project run by forum moderator auscraft. It shows methods of direction-finding and time-telling. The first method is a Crux clock, which is a method of telling time using the Southern Cross, then there's the old standby of finding north using an analogue watch, and finally the traditional bushman's method of telling the time using your hands and the sun. What I like about this project is that instructions aren't laid out step-by-step, so you're forced to do your own research.

The Bush course contains projects which are to be completed out bush. At time of writing these include; Animal ID, Carving, Bush Damper, Animal ID Advanced, Feather Sticks, Fire Making. More Bush Course projects are under development.

Results for each project are assessed and evaluated by an experienced forum moderator who specialises in the subject area covered by the project.

Related to the forum, but on a separate site is the BushcraftOz Store. Set up as a way to provide quality traditional style equipment to local outdoor enthusiasts, the store is known for its great pricing, quick shipping and impeccable packaging. I've purchased a few things online and it's all been good quality gear.

It's not really a store you'll find advertised anywhere, and word of mouth seems to be how they prefer to attract customers, so let's keep it our secret.

Website: www.bushcraftozstore.com.au



The BushcraftOz Store offers a good variety of useful and quality gear backed up by great customer service.

HISTORY

WE TAKE A LOOK BACK AT WWII BUSHCRAFT SURVIVAL TRAINING IN AUSTRALIA.

BY C.A. BROWN

40 years before the Bush Tucker Man, the Australian Army had training teams teaching soldiers how to survive in the worst conditions the Australian continent can offer.

n the early days of WWII a "Home Guard" service of sorts was established in Australia. This service was known as the Volunteer Defence Corps and its roles included fixed position defence, intelligence-gathering and guerrilla warfare in the event of a Japanese invasion of Australia. Many of Australia's most experienced and skilled bushmen were working in reserved occupations in forestry and agriculture and were unable to enlist in the regular forces, so the VDC was their only avenue into uniform and their only



Queenslander, Captain (later Major) VH Chargois, second-in-command of the far north Queensland 17th Battalion, Volunteer Defence Corps demonstrating the uses and identification of the Polynesian Arrowroot (*Tacca leontopetaloides*) to local Militia troops in the Mossman area in 1944. Chargois was one of the Army's foremost wild food experts during WWII and ran survival courses in the Cairns area for regular and Militia troops as well as for Australian, US and Dutch special forces. AWM 063699



South Australian Warrant Officer II H.A. Lindsay of the Australian Army Education Service, 6th Division based at Herberton on the Atherton Tableland in Far North Queensland lecturing troops on water procurement from vegetation in 1944. After the war, Lindsay wrote *The Bushman's Handbook*.

way to contribute to the war effort. Experienced bushmen such as HA Lindsay, an apiarist, were allowed to enlist in their local VDC units and soon Lindsay and others such as VH Chargois in Cairns began to see a major gap in the VDC training schedule - it completely ignored bushcraft, a topic of great importance to a potential guerrilla fighter who could reasonably be expected to operate without proper resupply for months on end. After much lobbying, bushcraft training was added to the VDC instructional agenda and local courses were run.

In early 1942, the reserved occupation scheme was relaxed and many VDC personnel found themselves eligible to transfer either to the Militia (army reserve) or the AIF (regular army). HA Lindsay transferred to the AIF in 1942 and as a writer was snapped up by the Australian Army Education Service as a subject matter expert on bushcraft and living off the land. Promoted to Warrant Officer 2nd Class, Lindsay was given his own team and told to go forth and develop a survival training curriculum for troops in Northern Australia.

It was around this time that Lindsay wrote Australian Bushcraft, a short, 50 page pamphlet on bush survival skills published by the Australian Army Education Service. The pamphlet was distributed widely and soon there was high demand for a training course along the same lines.

Posted to the Australian 6th Division in the new army base area on Queensland's Atherton Tableland, Lindsay's team started conducting "Living off the Land" training for men from newly-arrived infantry brigades. The curriculum for the first course was comprised of the following topics:

- Lighting fires in wet weather or with damp or green wood;
- Six ways of lighting fires without matches;
- Obtaining water from tree roots;
- Obtaining water from tree trunks:
- Birds which will always guide you to water;
- Where you can locate water at shallow depth by digging;
- Where to camp and where NOT to camp;
- How to avoid getting lost in the bush;
- Identification of edible plants;
- Snaring game;
- Aboriginal fishing methods;
- Keeping healthy in the bush;
- Building bush shelters; and
- Tracking.

Lindsay's training courses became more complex as time went by and soon they were taking in a range of different terrain types including mountains, dry savannah country, mangroves, eucalypt forests and highland rainforest.

While Lindsay and his assistant Maurie Leask were conducting standard bushcraft training for regular troops on the Atherton Tablelands, Cairns-based VDC Captain Vic Chargois found himself working on his home turf on the coast in a far more secretive environment.

The Dutch military intelligence service in northern Australia had established its headquarters in an imposing, fenced-off timber homestead on the outskirts of Cairns known as "The House on the Hill". Before being transferred to the Dutch,

this facility had been operated by Australia's elite Z Special Unit on behalf of the Allied Intelligence Bureau as a multinational, inter-allied training base. After Z Special left the site, it continued to be used as a training base for Dutch, American, Indonesian, Australian, New Zealand and British special forces. It was here that Chargois was tasked with training these Allied commandos and coastwatchers in jungle survival, bushcraft and in particular in jungle food identification and use.

One of the major training areas for these jungle food and survival courses was the Mossman Gorge between Cairns and the Daintree River. Now a popular tourist destination, during WWII the Mossman Gorge was a trackless and almost impenetrable lowland jungle. With many species of plants identical to those found in New Guinea, Philippine and Indonesian jungles, Mossman was the perfect training ground.

Chargois' Special Forces Jungle Foods Course included the following topics:

Edibility tests;

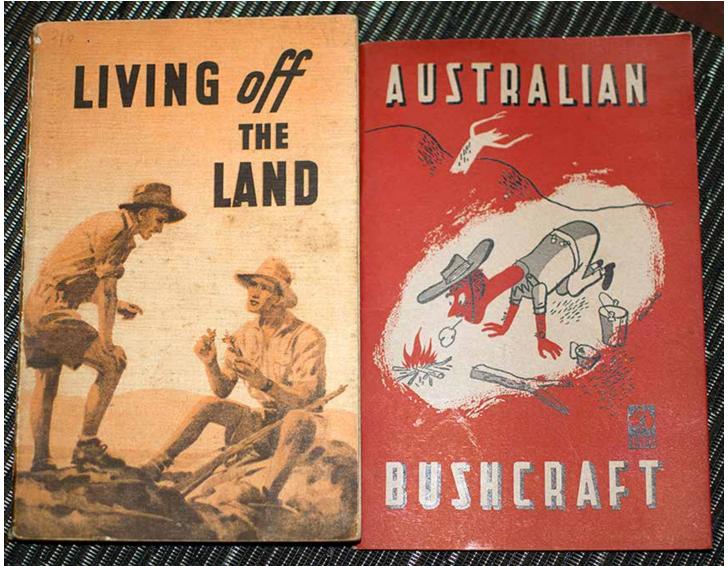
- Native gardens;
- Jungle food plants;
- Poisonous plants;
- Water from vines, rattan and bamboo;
- Fluid from coconuts;
- Water from moss;
- Fish-stupefying plants;
- Food from fish;
- Food from birds:
- Food from animals and reptiles; and
- Food from insects.

There are several verified instances of Allied personnel evading the enemy and living off the land using the information imparted to them in Chargois' jungle food and survival courses.

This article would be incomplete without a mention of Richard Graves. A WWI Gallipoli Veteran, Graves enlisted again in 1941 and was transferred to the AIF in 1942 after being commissioned as a Second Lieutenant. In civilian life Graves was an avid bushwalker and close friend of Paddy Pallin and had a very strong interest in



Victorian Acting Sergeant M.F. Leask of the Australian Army Education Service, 6th Division based at Herberton on the Atherton Tableland in Far North Queensland harvesting witchetty grubs in 1944. A/Sgt Leask was one of H.A. Lindsay's main bushcraft instructors. AWM 055435



In the absence of any official Australian military doctrine training pamphlets on the subject, there were two WWII-era Australian army publications dealing with bushcraft and survival - the Australian Army Education Service's Australian Bushcraft was written in 1942 by H.A. Lindsay. The 1944 publication Living Off The Land was a compilation of bushcraft articles from the Australian Army Education Service's journal Salt from the previous two years. Contributors to Living Off The Land included HA Lindsay and Ion L. Idriess.

bushcraft and survival techniques. In 1944 he published a compilation of bushcraft pamphlets as the book *Bushcraft - How to Survive in Jungle and Bush* under the pen name "Wontolla".

Later in 1944 Graves would be rescued from the endless monotony of manoeuvres with his antitank regiment in the NT and sent to New Guinea HQ where he was informed he would be detached to the US 5th Air Force on temporary duty along with fellow officer Captain I. Gillespie. The pair's role was to train US instructors in "jungle craft". At the conclusion of their three month training stint, both men were sent back to their units in Australia. As a full-time author in the post-war years, Graves traded heavily on his experiences training US personnel for those few short months in New

Guinea in 1944. It's interesting that in his *The 10 Bushcraft Books*, Graves makes mention of the fact that he was commanding officer of a Jungle Survival and Rescue Detachment. No evidence of the existence of this unit has been found in either Graves' service record or the records of the Australian Army's New Guinea Force HQ, and if it did exist, Gillespie would have been CO since he was the senior officer of the pair. For more information on Richard Graves, we profile he and his work in the next issue of the magazine.

The WWII bushcraft and survival training methods are only known today because they spawned a number of classic bushcraft texts which have served to ensure that the hard-won knowledge of those war years hasn't been lost.

EVENTS

AUSSIE KNIFEMAKERS MAKING WAVES AT THE INTERNATIONAL KNIFE SHOW IN SYDNEY

BY C.A. BROWN

www.CutlersExpo.com.au

"The Sydney International Knife Show will showcase the creations of some of the best Australian and international custom knife makers, manufacturers and suppliers of products and services to the knife-making and related industries."



Australian Technology Park - former site of the Eveleigh rail yard workshops, now it's a premiere industrial heritage and arts precinct and venue for the Sydney International Knife Show.



Australia's custom knife-makers are world-class. An excellent bushcraft-style knife and sheath handcrafted by Journeyman Smith Keith Fludder, co-organiser of the Sydney International Knife Show

erhaps HA Lindsay said it best when he declared in *The Bushman's Handbook* that a bushman who heads out bush without a knife is no bushman at all. A knife is the most basic of bush tools, but it is arguably the most important. With nothing but a sharp knife, you can make cordage and construct shelter, make fire, procure water, harvest and catch food, signal a rescue aircraft or even construct a bark canoe. It's little wonder that serious outdoor enthusiasts in Australia have always had a keen appreciation for a good quality knife.

Australia has a healthy community of custom artist blacksmiths and knife makers who are busily working at their craft, mostly out of sight of the general public. Some of the pieces made in Australia are exquisite and functional works of art while others are utilitarian tools designed purely for a lifetime of hard work. You'll find these custom Australian knives in the knife rolls of top Aussie and overseas chefs, in fishing boxes, on the belts and in the pockets of soldiers, hunters and bushmen all over the country.

Aside from those few end users and collectors in the know, public awareness of this rich Aussie knife-making industry has been almost non-existent... until now. The Sydney International

Knife Show and Cutler's Expo is the first knifemaking industry show of its kind to be held in Australia. It is the brainchild of co-organisers Corin Urquhart and Keith Fludder as a not-for-profit event which seeks to promote and showcase Australia's custom cutlers and their creations.

The venue for the show is Australian Technology Park at Alexandria, which is the site of the former Eveleigh Rail Workshops. Fittingly, the main exhibition space for the Knife Show is adjacent to the historic industrial Blacksmith Workshops. Aside from the various wares on sale by vendors and exhibitors, the Knife Show will include blacksmithing workshops, knife demonstrations, knife-making master-classes, chef competitions using exhibitor's knives and more. It's an opportunity to see the latest knife technology and knife-making techniques while at the same time experiencing old-time knifemaking with forge and anvil.

At time of writing there are some high profile exhibitors attending the show. These include:

- US Master Smith Bill Burke;
- Benchmade Knives
- Tandy Leather

- Kizlyar Knives
- ZU Bladeworx
- Southern Highlands Forge
- Tharwa Valley Forge
- Artist Blacksmith's Association of NSW
- Ironlord Forge
- Parker Knives
- Gameco Knifemaking Supplies and Blacksmith's Tools

Custom cutlery types showcased run the whole gamut from slip-joint pocket knives to fishing knives, hunting knives, bush knives, chef's knives and all the rest. In addition exhibitors will display swords, machetes, axes, tomahawks and other edged tools as well as custom blacksmithed products such as selected wrought iron-ware and medieval shields and armour.

One of the stars of this years' show is sure to be 11 year old Leila Haddad from the ACT. Daughter of Tharwa Valley Forge bladesmith Karim Haddad, Leila has been making handforged knives for the past six years - since she was five years old. Leila will no doubt have a good selection of her blades on display and for sale, but potential buyers should bring their wallet since her damascus blades are in demand among collectors.

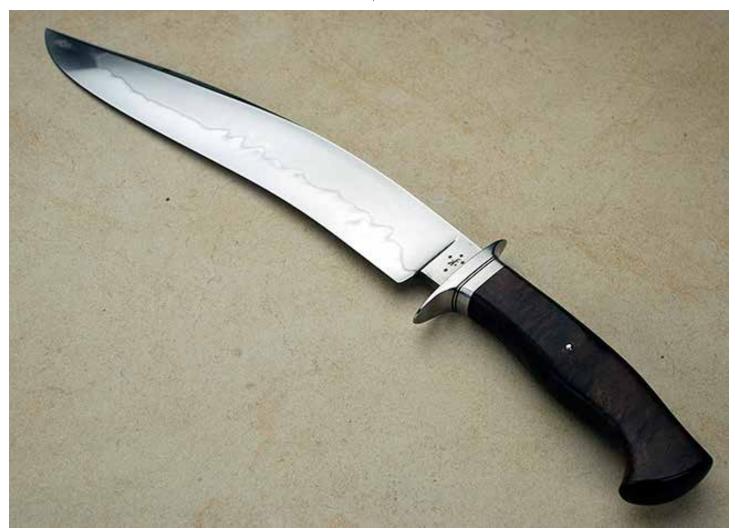
The Show is close to public transport. Redfern railway station adjacent to the site with regular services to the city circle and beyond all weekend. There are frequent bus services to and from the site from the city and Sydney's domestic and international airport. The bus stop closest to the Australian Technology Park is on the corner of Boundary and Regent Street. If you're driving, there's a secure car park on site. The entrance to the Australian Technology Park car park is from Henderson Road, Eveleigh.

There is disabled parking available - if required, advise security personnel at the main entrance and they'll direct you to the disabled parking area.

Just in time for breakfast or lunch on



The architects and founders of the Sydney International Knife Show, Keith Fludder (left) and Corin Urquhart (right) at Keith's Southern Highlands Forge workshop. Starting completely from scratch the pair have put together a world-class event.



Another example of an exquisite custom knife by Keith Fludder. Described by Keith as a fusion of a traditional bowie and a Nepalese Kukhri, this design is well-suited as a very capable general camp/bush knife, suitable for fine tasks as well as chopping courtesy of the deep belly and lightly flared pommel.

Saturday, and situated just across the railway lines at Carriageworks is the Eveleigh Farmer's Market. There will be a free bus running between the Farmer's market and the Knife Show until 1pm on Saturday.

This is the inaugural Sydney International Knife Show and Cutler's Expo and it is sure to be the first of many to come. Co-organisers Keith Fludder and Corin Urquhart are to be congratulated for their hard work in setting up this event from scratch and initially without an operating budget. It's a great example of how far you can go on passion, will and simple determination.

I'll be attending the show and I'm looking forward to seeing it all come together as the huge success it deserves to be.

If you're not doing anything on the weekend of the 23rd and 24th of August, feel free to come along and show your support for the inaugural Sydney International Knife Show & Cutler's Expo.

SYDNEY INTERNATIONAL KNIFE SHOW

When -

Weekend of 23rd & 24th of August 2014 from 10am to 4pm both days

Where -

Australian Technology Park, 2 Locomotive St, Alexandria NSW

Details -

Web - www.CutlersExpo.com.au Email - events@sssevents.com.au Phone - 1300 833 377

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BUSH COOKERY

"COOKING" IN THE MIGHTY CUPS, CANTEEN

BY C.A. BROWN

hey've been around in one form or another for over 100 years. In the 1910s they were favoured by American outdoorsmen such as Horace Kephart and his contemporaries. The US army has used them all along, European NATO forces have had them since the 1950s and the Australian army began issuing them in their current form from 1959 onwards, with the typical military Yoda-speak designation of "Cups, canteen". Even the British army jumped



Some military and commercial canteen/cup sets. Clockwise from top left - My personal "bushcraft" set - 44 pattern bottle, French cup, modified US canteen cup stove/stand, Milbank filter bag, aquatabs, brew kit and canvas Aussie "hexy" waterbottle pouch; British Osprey bottle, plastic cup with hexy stove and steel Crusader cup in a PLCE pouch; American "bushcraft" set - Nalgene Oasis bottle, US canteen cup, US canteen cup stove in a MOLLE II pouch; WWII US army set - Aluminium canteen, WWII cup, "cavalry" pouch with belt loops; Standard-issue 44 pattern set - Bottle, cup, Milbank filter bag, belt pouch. These are just some of the multitude of types available.



A typical canteen cup in use - in this case a British armyissue Crusader canteen cup. A great billy replacement.

on the bandwagon, issuing a canteen cup from 1945 until the 1960s for jungle use, then issuing a new type in the 1990s to every British squaddie.

So what is the Cups, Canteen? Normally known as simply a canteen cup or even as a kidney cup, it's a stainless steel or aluminium pot which nests with a water canteen inside the canteen pouch. It typically has folding wire or

stamped sheet-metal handles and is mostly used in military service for making tea or coffee, as a shaving mug, or as a boiling vessel for heating up cans or pouches of food. It's rare that a soldier will actually try to cook anything in the cup itself since the cleanup can be horrendous and the risk of food poisoning from a ratty cup is very real for a soldier with only limited personal admin time on exercise or on operations.

Most outdoors, bushwalking and bushcraft enthusiasts however will make the time. In fact for some, the act of cooking complex meals with minimal equipment on a campfire is a big part of the fun. For most of us though, we don't get much more complex than boiling, baking, stewing and frying. All of these things you can do in a canteen cup. Whether it's making damper or raisin-filled sweet johnnycakes, frying up

some bacon to go with your powdered eggs, or simply making a bowl of two-minute noodles, you can do it all with that funny, kidney-shaped cup thingamabob in your water bottle pouch.

To make life easier, there are a few bits and pieces you might want to add to your cups, canteen cookery kit:

- A couple of snack or sandwich-sized ziplock bags - these can be used to cook in or for heating up food;
- A metre of aluminium foil useful for baking and for making an improvised lid for your canteen cup; and
- A couple of steel wool pads, a piece of sponge/scourer or even a bit of emery paper
 trust me, you'll probably need it.

None of these things take up all that much room and all can be stored in the bottom of the water bottle pouch under your canteen cup.

Boiling in the Cups, Canteen

This is the most common use of the canteen cup. It allows you to heat tinned food without a mess, sterilise dodgy water, boil noodles or vegetables, boil water for rehydrating freezedried meals and of course you can heat MRE-style "slop-in-a-bag" sachets in the cup as well.

One interesting and related cooking method is that of making a powdered egg breakfast omelet. Using a snack sized ziplock bag containing three tablespoons of powdered

egg, fill the bag 1/3rd the way with cold water and mix well by massaging and kneading the contents. Meanwhile the canteen cup will have been brought to the boil so simply dump in the sealed bag and 10 minutes later you have a cooked egg omelet which you can eat straight out of the bag with no messy cup to clean.

A variation of this method is to empty tinned food such as Irish stew or soup into the ziplock bag and heat it in the boiling water. Since the Glad brand ziplock bags at least are BPA-free, you can enjoy a hearty stew right out of the bag without



Powdered eggs (with curry powder added - the only really effective way to make them anywhere near edible) mixed in a ziplock bag and boiled in the canteen cup.

the cleanup. If you're careful you can also wash, sterilise and reuse the same ziplock bag a couple of times. Just turn it inside out and wash it down with a bit of boiling water. No mess, no fuss.

Baking in the Cups, Canteen

Did you know you can make damper, johnnycakes or even muffins in a canteen cup? You can even do it on a gas cooker or metho stove.

To make damper, first pre-pack a cup of wholemeal self-raising flour and a pinch of salt into a sandwich-sized ziplock bag. Fill the bag 3/4 the way with cold water and then knead it inside the bag until it becomes a dough. Now grab a handful of gravel and place it into the bottom of the canteen cup in a single layer. Don't use round



Heating slop-in-a-bag in boiling water in a Crusader cup on an old school hexy stove. This is the most basic and common form of cups, canteen cookery.

river or creek-bed pebbles or when they explode you'll fill your damper with rock shrapnel and break a tooth. Basic blue metal or even some bauxite work well and either is available along most bush vehicle tracks, particularly those which have just been repaired after wet season flooding. The purpose of the gravel is to add a hot air zone between the foil and the red hot bottom of the cup. This way your damper will cook more evenly and won't burn on the bottom.

Using a bit of foil, make a cup arrangement which is

deep enough to allow you to twist the top closed. Squeeze or dig the dough out of the bag and drop it into the foil cup, then close the top. Place the canteen cup on your heat source and let it bake until it's done. You can also do spuds and even lamb, beef, fish, carrots and pumpkin using this method. If you usually carry two water bottles and canteen cups like I do you can literally cook yourself a baked dinner if you have a couple of ziplock bags and some aluminium foil.

Stewing in the Cups, Canteen

Sometimes you just don't care about the

cleanup, and you want a ridgeydidge bushman's beef stew. If you have the fresh ingredients you can turn your canteen cup into a mini camp oven.

Braise meat and onions over a high heat using the bottom of the cup as an impromptu frypan, then add your chopped veggies and a bit of salt and spices. Add your water and then cover the cup with a three or four-layer improvised lid of foil, or you can make one to fit at home out of an empty food tin with some tin snips. Your fire should have burned down to coals, so dig a hole in the ashes, add a few nice coals and



Cooking bacon in the canteen cup is simple and a lot less messy than you might think.

then place the cup in the hole. Rake more coals up both sides and cover the foil lid with a bit of stringybark or a small mat woven out of lomandra fronds upon which you will place more coals.

Leave it all alone now for a couple of hours and when you come back to it you'll have an individual-sized melt-in-the-mouth casserole, perfect for a cold winter's evening in the scrub.

Frying in the Cups, Canteen

You can use your canteen cup to fry up some fresh bacon, or steak, or sausages, or even freshly-caught fish portions.

This method has been successfully tested



Cooking this rib-eye scotch fillet steak in the canteen cup was just as easy as cooking bacon, just took twice as long to cook through.

on an open campfire, a gas cooker and a metho stove. The folding hexamine burner will fry the tucker fine, but it'll also poison it with hexamine fumes, so it's probably not the best method.

As per the image on the preceding page, place your cup onto the fire on its side with the handle facing up. You can fry on a twig fire as per the photos, but a decent campfire with a good combination of coals and flames will give the best results since the flames will sear the food while the coals will cook it through. A couple of middle rashers of bacon only take a few minutes each side depending on how crispy you like it. The cooking times are just the same as in the frypan at home.

Steak takes a bit longer than bacon rashers unless you like your cow "blue and mooing". It takes about 15 minutes total to cook your steak medium rare in a canteen cup on a small twig fire.

Cleanup using the French aluminium cup following the photo-shoot only took a bit of a wipe out and light scrub with a soapy sponge/scourer and a rinse out with boiling water to sterilise the cup ready for its next cooking adventure.

A word of advice - unless you have a good supply of butter, edible oil or dripping, don't try to fry eggs in the cup. Without a lot of practice you'll burn the eggs and fuse the residue to the inside of your cup. If this happens, only your local media blasting mob will be able to scour it clean and make the cup usable again.

As you've probably realised, the principles of cups, canteen cookery are fully transferable to whatever metal boiling vessel you may take out bush. Most of this stuff works in a billycan (and if yours has a wire handle on the lid the lid makes a great frypan), in a quart pot, in a set of army-style mess tins and in a Trangia pot or even a Snowpeak* titanium mug. However, the humble canteen cup, with its modular, nesting design is uniquely suited to minimalist cooking and it is here that it excels.

Most Australian outdoors-folk, particularly bushwalkers, will avoid using a canteen cup based on the weight of the Australian-issue stainless steel versions. If they were to try out an aluminium cup and nest it with an army canteen-shaped Nalgene Oasis water bottle, they'd probably find it a very workable system, particularly if they are just boiling water for freeze-dried meals. One day some forward thinker may even bless bushgoers with a titanium version of the Aussie canteen cup.

BUSHMAN'S COFFEE:

Although Aussies have been brewing tea in a similar way for generations, we recently stole this idea from the Americans and then called it something cooler - just like the canteen cup itself. This is the method for making what the Americans call "Cowboy Coffee". It allows us to brew a great cuppa out bush using real coffee and without any form of filter. What you need is a billy and an enamel mug - quart pot and pannikin works, as does a canteen cup - and you'll also need boiling water and some coffee grounds.



Step 1 - Add your ground coffee to your canteen cup. Here we're using Italian Illy coffee, but even the cheapest grounds will taste great using this method.

Step 2 - Add boiling water. At this point your coffee will be a thick, soupy mess full of floaties as well as sinkies.

Step 3 - Tap the rim of your cup with a spoon, back of a knife blade, etc. This helps settle the grounds.

Step 4 - Give it a good splash of cold water. This will also settle the grounds.



NATURALIST'S CORNER

WE TAKE A LOOK AT SEASONAL INDICATORS IN SOUTHEASTERN AUSTRALIA

BY C.A. BROWN

Observation of natural cycles can provide some good lessons in the concept of cause and effect and it illustrates the interconnectedness of everything which exists within a given ecosystem. Indigenous people have, over millennia, learned to identify and read natural cycles using what could be considered sound scientific methods - observation and experience. They even recorded the results through stories and teaching and the knowledge has been passed right down to the present day. It goes without saying that this unique knowledge contributed greatly to the ability of Indigenous Australians to thrive in Australian conditions.



Red sky at night, shepherd's delight...

boriginal people have inhabited the Australian continent for more than 2400 generations. Throughout this time they have seen hot and wet periods, drought lasting for generations, the demise of the mega-fauna, ice ages and sea levels rising and falling to the extent that the coastline was more than a week's walk to the east. These are ancient events which pre-date western civilisation by millennia and yet, knowledge of them has been retained within Aboriginal language groups throughout the country to this day through the mediums of storytelling in spoken word, mime, song and visual art. This Indigenous

knowledge has been defined as "a cumulative body of knowledge and beliefs handed down through generations by cultural transmission about the relationship of living beings (including humans) with one another and with their environment"

Even with our information storage and retrieval technologies such as the written word, magnetic audio tape and digital data storage, we have only been able to scratch the surface when it comes to seasonal indicators and weather lore. It's not that there hasn't been any interest. For example, in Britain in the second half of the 19th Century an extremely popular discipline developed which would come to be known as Phenology - the study of the timing of recurring natural events, such as the first flowering of a tree, the ripening of fruit and the first appearance of migratory birds, particularly in relation to climate. This school of study has been revived in recent years by those seeking to provide evidence for the existence of global warming so it has seen a dramatic resurgence.

It's a relatively basic task to get your teeth into - simply spend time in the natural world and take note of what you see. Use a nature watch diary and record your findings and in a year or so you'll see clear patterns of cause and effect emerging. I'm preaching to the choir to a certain



When the fruit of the lilly pilly ripens and falls to the ground, the cold weather is not far away. "Syzygium smithii" by Melburnian - Self-photographed. Licensed under Creative Commons Attribution 3.0

degree here, since I know there are people out there, like me who observe, take note and record changes to satisfy their own insatiable curiosity about our natural environment.

Both the CSIRO (Commonwealth Scientific and Industrial Research Organisation) and the BOM (Bureau of Meteorology) have supported research into what they have termed "Indigenous Weather Knowledge". The Bureau of Meteorology in particular has been busily working to promote awareness of their Indigenous Weather Knowledge project, since it fulfills one of the BOM's charters: to further the understanding and knowledge of Australia's weather and climate.

The BOM Indigenous Weather Project...

"recognises the knowledge of weather and climate developed over countless generations by Australia's Indigenous communities, nicely complementing science and statistically based approaches. It provides an opportunity for communities to showcase their knowledge and for other Australians to learn more about Aboriginal and Torres Strait Islander life and culture.

The calendars recognise the complexity and diversity of weather over the Australian continent and are finely tuned to local conditions and natural events. Unlike European spring, summer, autumn and winter, the Indigenous versions often include

five, and sometimes seven distinct seasons."

Source: http://www.bom.gov.au/iwk/about/index.
shtml

A visit to the BOM's Indigenous Weather Knowledge (IWK) site reveals a wealth of entries on North and Northwestern Australia, but only a few for the rest of the country. Luckily, one of the areas covered is the homeland of the D'harawal language group. The D'harawal Country and language area extends from the southern shores of Port Jackson (Sydney Harbour) to the northern shores of the Shoalhaven River, and from the eastern shores of the Wollondilly River system to the eastern seaboard of the Sydney region. The species and climate of this area are similar to what can be found all the way down to the Victorian border and beyond, so a good proportion of the D'harawal Calendar presented on the BOM's IWK site is valid for a big chunk of the eastern seaboard.

The website address for the D'harawal IWK

site is - http://www.bom.gov.au/iwk/dharawal/index.shtml. Once you visit the site, you'll notice that the D'harawal calendar divides the year into six basic seasons, the names of which translate into:

- Hot and dry;
- Wet, becoming cooler;
- Cold, frosty, short days;
- Cold and windy;
- Cool, getting warmer; and
- Warm and wet

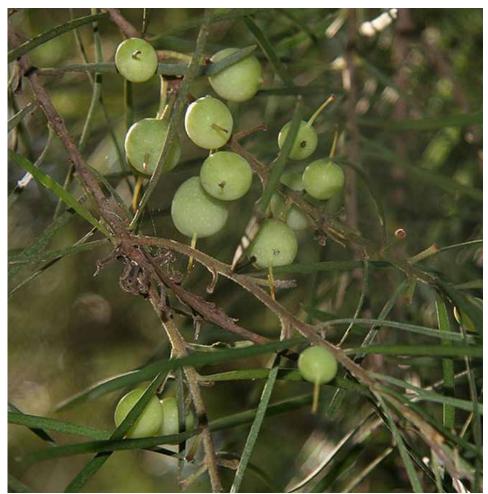
These are far more appropriate to conditions in that area than the typical European Summer/Autumn/Winter/Spring model we all grew up with.

Although based on the research and the traditional knowledge entrusted to D'harawal elder and recognised botanist and author Frances Bodkin, the BOM site only contains half the story. In 2013, Frances Bodkin and illustrator

Lorraine Robertson released a an updated version of a previous book collaboration. The new book is called *D'harawal Climate and Natural Resources* and it covers far more than just a yearly cycle. Traditional cycles began with the time of day, before moving onto the annual cycles.

The Mudon Cycle lasts for between 11 and 12 years and was designed to coincide with a boy's initiation age. This cycle covered long droughts, cold/wet years, warm/wet years, hot/dry years again and the buildup periods for each of those distinct seasons.

Then came the big one - the Garuwanga or Dreaming Cycle has four seasons, including a hot time of destruction, a cooling time of renewal and a cold time of destruction. This cycle spans between twelve to twenty thousand years and changes in the cycle are indicated by changes in the sea levels. The cycles and their indicators are woven into the stories of individual clans who



When the fruit of the geebung begins to ripen, traditional Aboriginal game animals such as possums, bandicoots and wallabies may be found nearby. "Persthirlmerelakescropped" by Casliber - Own work. Licensed under Creative Commons Attribution-Share Alike 3.0



Traditionally in southeastern Australia, the blooming of the *Acacia decurrens* signified the end of a cold and windy winter. If it bloomed in excess, this was an indicator that there was a large risk of a bad bushfire season.

collect and guard the knowledge of a particular cycle for their region, ensuring the knowledge is passed to each new generation.

It all falls pretty far outside the awareness of the average Aussie, but the concepts have been heavily promoted by Frances Bodkin and her colleagues as a way of measuring climate change and identifying new indicators. If you'd like to purchase a copy of D'harawal Climate and Natural Resources it is still in print and is available from the publisher, Envirobook Distribution through their website at www.envirobook.com. au. It's is also available through Booktopia (http://www.booktopia.com.au/d-harawalclimate-and-natural-resources-frances-bodkin/ prod9780858812451.html) and through Angus (http://www.angusrobertson. and Robertson com.au/book/dharawal-climate-and-naturalresources/41962056/).



Annual calendar based on the Indigenous D'harawal Weather Knowledge as seen on the Bureau of Meteorology's Indigenous Weather Knowledge site. The calendar takes the 12 months of the year and assigns them to the 12 monthly cycle.

Knowledge © Frances Bodkin

THE LIGHTROOM

BUSH PHOTOGRAPHY

Each issue we showcase Australian bush and nature photography submitted by our staff and readers.



Burning Palms Beach, NSW 2014 - C.A. Brown



Immature cherry ballart fruit, Nattai river valley, NSW 2014 - C.A. Brown



Nattai river valley, NSW 2014 - C.A. Brown



Ahearn's lookout from the Nattai river valley, NSW 2014 - C.A. Brown





C.A. Brown



Alum River junction campsite, Nattai river valley, NSW 2014 - C.A. Brown



Freshwater mussels, NSW 2014 - C.A. Brown



Fungi, Forest Walk in the Royal National Park, NSW Crested pigeon, near Goulburn, NSW 2014 - C.A. Brown 2014 - C.A. Brown





Morning on Lake Yurrunga, Kangaroo Valley, NSW 2014 - C.A. Brown



Boilers at Yerranderie, NSW 2014 - C.A. Brown



Sunset over Byrnes Gap, Yerranderie Peak, NSW Liloing the Shoalhaven River, NSW 2014 - C.A. Brown 2014 - C.A. Brown





Red-bellied black snake, Shoalhaven Gorge, NSW 2014 - C.A. Brown



Ancient Xanthorrhoea Badgery's plants Shoalhaven Gorge, NSW 2014 - C.A. Brown



Shoalhaven Gorge, NSW 2014 - C.A. Brown



View over Kangaroo Valley from Mt Carrialoo, NSW 2014 - C.A. Brown



Valley, NSW 2014 - C.A. Brown



Hammock campsite on the Nattai, Nattai River View of Lake Burragorang from Beloon Pass, NSW 2014 - C.A. Brown





The upper Georges River, NSW 2014 - C.A. Brown Yellow robin feeding on a centipede, Thirlmere Lakes, NSW 2014 - C.A. Brown

If you'd like your own photos showcased here in the magazine's Lightroom section, send us an email at contact@australianbushcraftmagazine.com

ADS FROM THE PAST

In the days before modern, all-alike chain stores like Bunnings and Mitre 10, hardware stores were independent, local, standalone businesses who catered to the special needs of their local customers rather than simply to the shareholders of some cooperative or parent company. In the 1940s, one such hardware store was Hudson's. Situated at the Spencer St end of Bourke St in Melbourne's central business district, Hudson's stocked a wide range of canvas goods, tents and camping gear of all types. Two pages from their 1941/42 camping gear catalogue are reproduced here. Source - http://handle.slv.vic.gov.au/10381/142402



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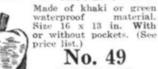




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AUSTRALIAN BUSHCRAFT

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THE FIRST QUARTERLY ISSUE - SPRING 2014

RICHARD GRAVES - THE FATHER OF MODERN AUSTRALIAN BUSHCRAFT

FIRE BY FRICTION - THE BOW DRILL

PURIFYING WATER BY DISTILLATION

THE HOOTCHIE - THE ORIGINAL AUSSIE **LIGHTWEIGHT TARP TENT**

BUSHWALKING IN THE OLD STYLE

TRIP REPORT - THE BILLYCAN & BLANKET WALK

ONLINE ROUNDUP - THE AUSTRALIAN ISSUE DUE OUT 30th of BUSH FOOD, BUSH TUCKER, MEDICINES, AND USEFUL PLANTS FACEBOOK PAGE

BUSH GOOKERY - PRESERVING YOUR FOOD

NATURALIST'S CORNER - TRACKING

GEAR REVIEWS

BOOK REVIEWS

MAND MUCH MORE

Spring Quarterly September 2014...ish

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